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ROMANIAN ACADEMY

"COSTIN C.KIRIŢESCU" NATIONAL INSTITUTE FOR ECONOMIC RESEARCH

"VICTOR SLĂVESCU" CENTRE FOR FINANCIAL AND MONETARY RESEARCH

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Research published scientific research aimed both economic development and clarification of the current economic phenomena and processes. As a result, conclusions and proposals offered by the authors address both academia - scientists, teachers, students - as well as decision makers. We emphasize the importance of scientific contributions, together with the clarity of concepts, methodologies and conclusions offered.

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PLENARY SECTION

INVESTMENT AND ECONOMIC GROWTH ON MEDIUM AND LONG TERM

Lucian-Liviu ALBU[1]

Abstract

In line with the economic growth theory and how economic history demonstrated, investment is one of the main factors of a sustainable long term growth. Today when globalisation phenomenon is extending and the risk to return to a crisis period is still a persistent perspective, to stimulate the investment (from domestic and foreign sources) is one of the major problems of ensuring a long term growth. Following some our previous studies regarding the correlation between investment and economic growth in European Union, based on macroeconomic available published data and on recent forecasts of specialised institutions from international organisations (IMF, EU, WB), we try to design few alternative scenarios for the future dynamics in Romania and its place in EU.

Keywords: European Union, convergence, GDP, economic growth, regional convergence,

JEL classification codes: O52, O47, R12

1. Introduction

Starting with Solow model (1956), the major role of investment in achieving a firm and stable long run economic development has been entered by more than a half of century in the core of standard economics. All around the world, economists from developed countries and from developing countries tried to support empirically the theoretical model or even to develop it. At the beginning of 90's, many studies, initiated by Barro and other economists, extended the research regarding the impact of investment by including the transition economies from Central and Eastern Europe and the problem of convergence, particularly in EU (Barro and Sala-i-Martin, 1991 and 1995; Levine and Renelt, 1992; Mankiw et al., 1992; Yin et al., 2003; Crespo and Fontoura, 2007, Monfort, 2008; Petrakos et al., 2011, etc.). One effect of globalization is that the accent has been moved from domestic saving, as main source of investment, to the movement of capital, to the FDI as carrier of knowledge and technical progress, to the financial market as a more flexible (but also more risky) source of investment. Today is generally accepted that every forecasting study or scenario must take into account the necessary effort of investment in order to accelerate economic growth.

In this article we report a number of research results, coming from some of our recent studies, mostly dedicated or related to the problem of convergence in EU (Albu, 2006, 2012, 2013, 2014, and 2016; Raileanu-Szeles and Albu, 2015; Albu and Caraiani, 2016). Firstly we present new trends demonstrated in matter of convergence in EU and analyse of Romanian position in this context. Then, after a short presentation of the particularities of the relation between investment and growth in EU, we focussed on building few scenarios of economic growth in Romania, as part of European Union, having as horizon the next two decades.

2. General convergence process in EU

The general economic convergence in EU is one of the basic premises for future development of less developed countries like Romania is. After 2000, in EU it was a continuous convergence between the two groups of countries, EU11 (former communist countries from Eastern part of Europe) and EU15 (old members of EU).

On the one hand, the level of GDP per capita (in euro PPS) in EU11 increased from 44.4% of average EU level in 2000 to 65.7% in 2014. On the other hand, the ratio between GDP per capita in EU15 and the average at EU level decreased from 116.0% to 108.9%. Moreover, a convergence in absolute terms was registered (the difference between the two groups of countries decreased from a maximum level of 14594 euro GDP per capita in 2006 to 11807 euro per capita in 2014).

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During the period, only inside of EU11 it was a trend of convergence, in EU15 being one of divergence. However, as it is shown in Figure 1, the discrepancy among countries within EU11 still continue in 2014 to be higher than inside of EU15 (σ% being the variation coefficient).

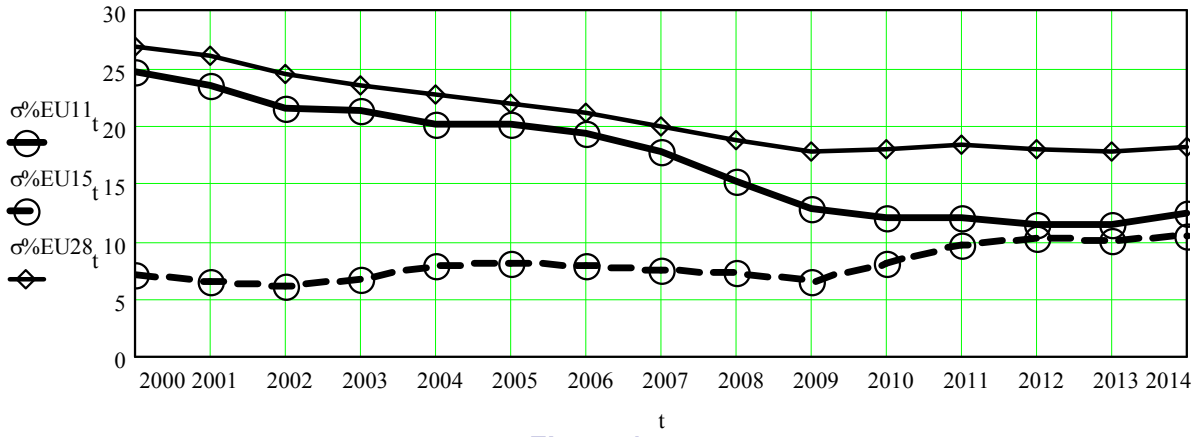


Figure 1

Source: Eurostat data and own computations (see also, Albu, 2016)

Available data at regional level (272 regions according to NUTS2 database) can facilitate a more refined analysis of the convergence process in EU. Using such information, during the period 2000-2013, the average level of GDP per capita in EU (expressed in PPS) increased from 19.2 thousand euro, in 2000, to 26.6 thousand euro, in 2013. The value of coefficient of variation (estimated by each year of the period) decreased from 33.1% in 2000 to 28.3% in 2013. At the level of EU, it was demonstrated a strong fundamental inverse correlation (-0.882) between the two variables, GDP per capita and its coefficient of variation, as it is shown in Figure 2 (*yM* is average GDP per capita in EU and *σ%y* - the variation coefficient).

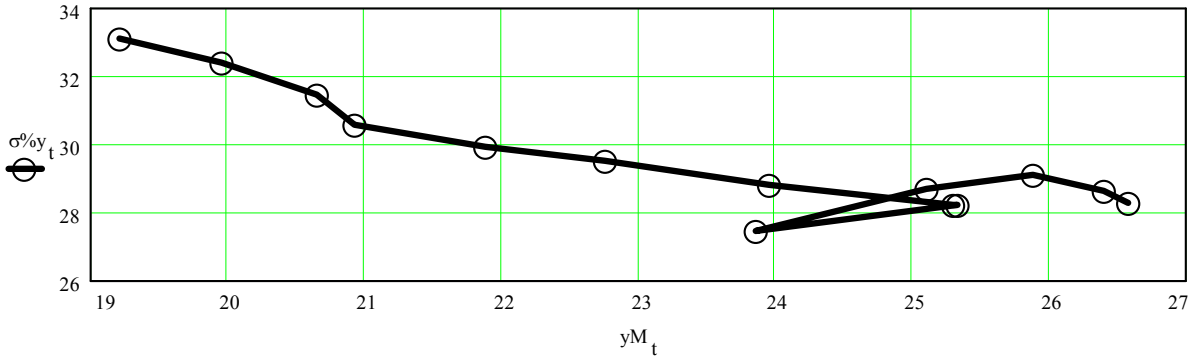


Figure 2

Source: Eurostat data and own computations (see also, Albu, 2016)

However, inside of a country, the convergence among its regions can evolve in a different manner than at the level of EU. Based on some recent studies (Albu, 2016), we are presenting here only few conclusions. Thus, there are at least two opposite forces in matter of regional convergence inside of a country, depending on the part in which that country is located at a given moment against the average GDP per capita in EU or equivalent against the value 1 of the variable "g" (g being the ratio between the average GDP per capita in a country and the average GDP per capita in EU). Taken into account the initial level of variable g (in 2000) and the changes (during the period 2000-2013) in its level (Δg) and in the variation coefficient ($\Delta\sigma$), can be highlighted the following typology:

a) Countries having an initial low level of variable g ($g<1$), which registered a higher growth of GDP per capita than the average growth in EU ($\Delta g>0$), but this was accompanied by a divergence among their regions ($\Delta\sigma>0$). This was the case of all countries in EU11. As example, in Figure 3 is presented the dynamics in case of Romania.

b) Countries having an initial low level of variable g (g<1), which registered a smaller growth of GDP per capita than the average growth in EU ($\Delta g<0$), but also a divergence among their regions ($\Delta\sigma>0$). Here is only the case of Greece.

c) Countries having an initial low level of variable g (g<1), which registered a smaller growth of GDP per capita than the average growth in EU ($\Delta g<0$), but this was accompanied by a convergence among their regions ($\Delta\sigma<0$). This was the case of Portugal and Spain.

d) Countries having an initial high level of variable g (g>1), which registered a smaller growth of GDP per capita than the average growth in EU ($\Delta g<0$), but this was accompanied by a convergence among their regions ($\Delta\sigma<0$). Here are included Austria, Belgium, and Finland.

e) Countries having an initial high level of variable g (g>1), which registered a smaller growth of GDP per capita than the average growth in EU ($\Delta g<0$), but also a divergence among their regions ($\Delta\sigma>0$). Here are included Denmark, France, Ireland, Italy, Netherlands, Sweden, and UK.

f) Countries having an initial high level of variable g (g>1), which registered a higher growth of GDP per capita than the average growth in EU ($\Delta g>0$), but also a convergence among their regions ($\Delta\sigma<0$). Here is only the case of Germany.

To note, the presented typology of convergence could be interpreted as covering a complex dynamics in line with the well-known curve of Kuznets (U-inverted curve) (Kuznets, 1955).

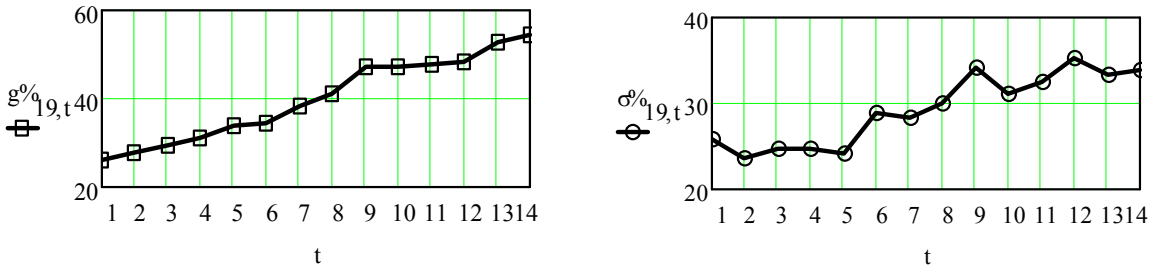


Figure 3

Source: Eurostat data and own computations (see also, Albu, 2016)

3. Romania's current position in the EU and recent dynamics

Romania currently ranks the following positions in the European Union (UE28): 7 as population, 9 as surface, 10 as dimension of economy (total GDP, in PPS), but only 27 as development level (GDP per capita). One of the main causes is the backwardness through the structure of the economy.

In matter of structural differences and low economic efficiency, as compared to EU average, could be noted, as follows: a large share of agriculture in employment (29% versus 5% in the EU); productivity per person employed in agriculture represents only 22% of the national average (last position in EU); in rural areas, where 47.2% of the population is living, there are no significant economic activity apart from agriculture, which leads to very low income (in Germany, for example, in rural areas live more than 26% of the population, but agriculture represents only 1.6% of total employment); as the share of services sector in total employment, Romania ranks last in the EU (42% versus 72% EU average); as the share of industry in employment (29%), Romania is placed over the UE average (23%), but the productivity is much lower than the EU average; one of the reasons is poor capital endowment, reflected by a coefficient of capital (the ratio between capital and GDP) of around half of the EU average (2.7) (in Germany, for example, the value is about double the average EU); etc.

However, during the last decade and a half there was a strong trend of convergence towards the average level of income in EU. Thus, while in 2000 the GDP per capita (in Euro PPS - Purchasing Power Standard) represented only 26.3% of the EU average, in 2015 it reached more than 55%. This trajectory was possible because, during the considered period, the growth of GDP per capita in Romania was more than double (2.128) than the growth of the average level in EU (the average annual rates were 8.5% for Romania and only 2.4% in case of EU).

For the next period, assuming an annual rate of 1.5% for the EU, in Romania it may achieve a per capita GDP equal to the European average just over 42 years in case of a rhythm double annually (3.0%), but only over 17 years if the annual rate in Romania should be 3.5 times higher, i.e. 5.3% per year, which corresponds to maintaining the same ratio between the two annual growth rates recorded in the period 2000-2013 (i.e. 8.52/2.39).

Indeed, the changing international context and the framework of EU policies must be taken into account. Thus, the global crisis has seriously affected significantly and delayed EU convergence programme. During past years there are new trends in the global economy, new risks, but also new opportunities for the Romanian economy. It is trying to invigorate economic growth by new policies of the EU (this time emphasizing on the stable and sustainable development), starting from the fact that the growth will not return to dynamics registered before the crisis.

In order to align to the convergence programme promoted by the EU, Romania through its own convergence programme needs to meet the key indicators set out in The Strategy Europe 2020. It will guide the evolution of Romanian economy in the short term (with implications on the social and environmental problems) while ensuring the prerequisites for continuing a favourable dynamics in the medium term (until 2025).

At present, although it is considered that Romania meets the nominal convergence criteria, they will continue to be priorities for government policies and the European Central Bank. Insofar and real convergence will reach a satisfactory degree, joining the Euro zone may be started (2019 is still planned in official documents).

4. The need for a massive investment effort

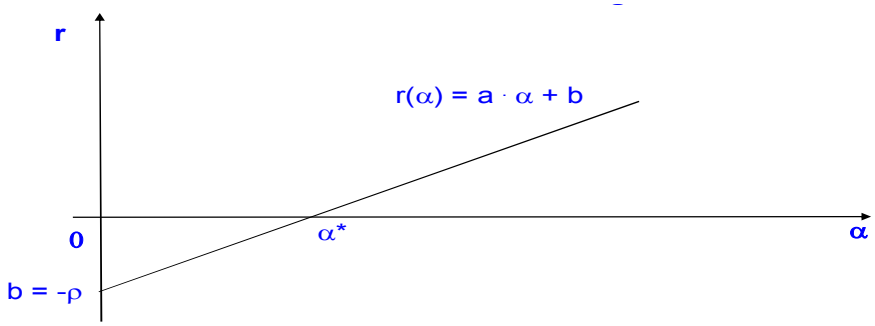
A rapid pace of economic growth in Romania can only be achieved through investments (as with most countries of the world during periods of expansion, see Japan's experience in the past, "Japanese miracle", or China today, "Chinese miracle" and the countries of western Europe after the world war II).

Infrastructure investments will be decisive, including by the fact that they can facilitate the connections of poor areas to the economic circuits and hence the growth in income of households (in Romania was registered in the last decade a significant divergence in regional profile in matter of per capita income).

The main sources for massive investment effort will be provided by domestic savings (people, companies and government), but also through smart policies to attract productive foreign capital (not just for consumption of imports). Financial market (now being only in an incipient stage), together with the banking system, will play a key role in ensuring efficient resource of capital, in draining of the savings and other financial availabilities to investment and finally to the productive activity.

In order to illustrate the impact of investment effort on economic growth, in Figure 4 is presented schematically a simple model and in Figure 5 two images (surface plot and contour plot) of the correlation y-α-r for countries in EU for the period 2000-2014 (where: y is GDP per capita, in thousand euro PPS; α – investment share in GDP, as %; r - the average annual growth of GDP, as %).

The Relation between investment and growth



r(α)	=	a · α + b
ρ	=	-b = A/K = 1/d
k	=	1/a = K/Y
α*	=	ρ · k = k/d = A/Y

where: A - amortization; K - capital stock; Y - GDP; d – average lifetime fixed capital

Figure 4

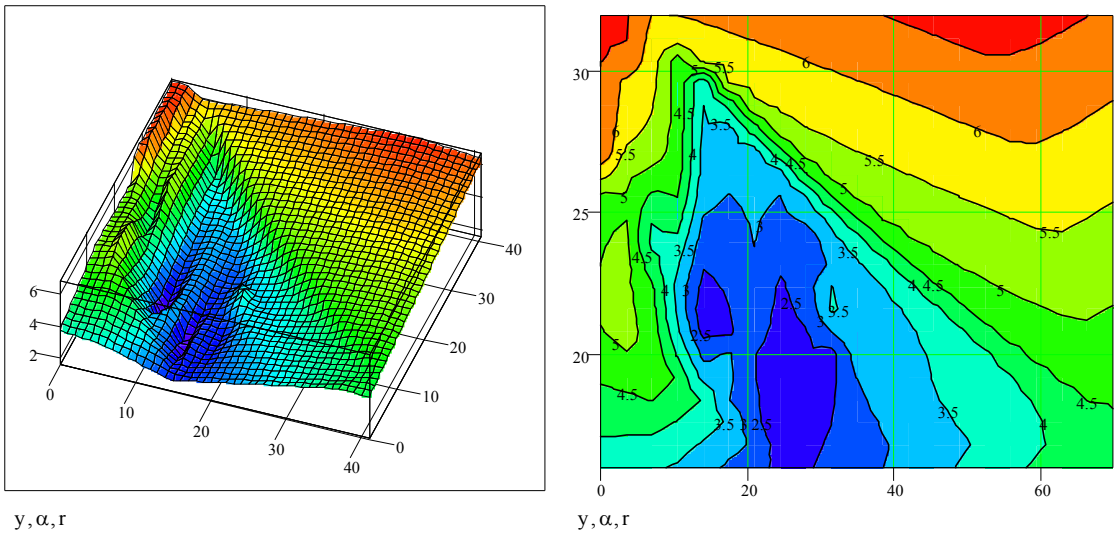


Figure 5

Source: Eurostat data and own computations

In Table 1 are presented the estimated parameters for countries of EU for the period 2000-2014 (where: yM is the average GDP per capita, in thousand euro PPS; αM – investment share in GDP, as %; rM – the average annual growth of GDP, as %; βM – the average investment efficiency, as ratio between ΔY/I, Y being GDP, and I – investment). Some result estimates at the level of EU are as follows: a = 0.248 = 1/k (k = 4,027); b = -ρ = -2.185%; α* = 8.8%; corr(αM, yM) = -0.554; corr(yM, rM) = -0.446; corr(αM, rM) = 0.508. Moreover, in Figure 6 is presented graphically the correlation between the investment share in GDP and the growth, both of them as %, at the level of EU (rMe is the estimated regression line).

Table 1

		yM	αM	rM	βM
1	Austria	30.093	24.0	2.6	10.7
2	Belgium	28.495	23.3	2.6	11.2
3	Bulgaria	9.176	26.0	4.9	18.8
4	Croatia	13.805	24.9	3.6	14.3
5	Cyprus	23.005	21.1	3.5	16.4
6	CzechRep	19.092	28.8	3.6	12.5
7	Denmark	29.775	21.3	2.4	11.1
8	Estonia	14.421	30.6	6.0	19.6
9	Finland	27.575	23.1	2.4	10.4
10	France	26.958	22.4	2.4	10.5
11	Germany	28.054	20.0	2.7	13.5
12	Greece	20.736	21.6	1.3	6.1
13	Hungary	14.745	23.4	3.9	16.7
14	Ireland	32.560	22.4	4.0	17.8
15	Italy	25.648	20.5	1.4	7.1
16	Latvia	12.206	29.1	5.6	19.1
17	Lithuania	13.274	22.1	6.3	28.5
18	Luxembourg	60.149	18.8	4.4	23.3
19	Malta	19.712	20.3	3.3	16.0
20	Netherlands	32.163	21.0	2.3	10.9
21	Poland	13.147	21.2	5.3	24.8
22	Portugal	18.723	22.2	2.4	10.8
23	Romania	9.406	26.5	7.4	27.8
24	Slovakia	15.377	26.0	5.6	21.7
25	Slovenia	19.973	26.0	3.0	11.5
26	Spain	23.607	26.2	3.3	12.4
27	Sweden	29.969	22.7	2.8	12.5
28	UK	27.708	17.8	2.3	13.0

Source: Eurostat data and own computations

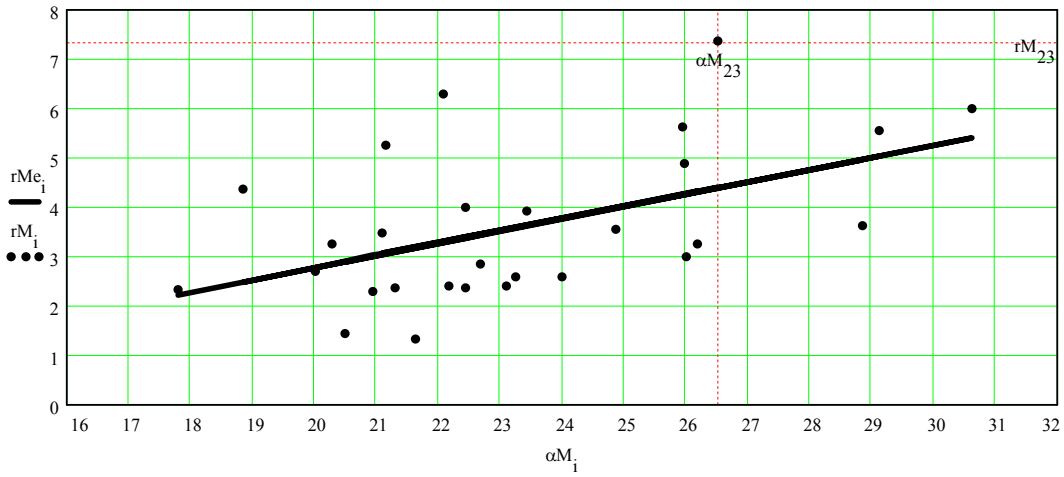


Figure 6
Source: Eurostat data and own computations

In order to highlight the important role of FDI on economic growth, we estimated, for EU, the correlation between FDI per capita and GDP per capita, using a Saturation Growth-Rate Model. Graphical representation of this correlation for 2010 is shown in Figure 7 (where y is GDP per capita, x - the stock of FDI per capita, yE - the estimated theoretical curve, and i representing EU countries). A similar regression model we used for Romania to build forecast scenarios up to 2020.

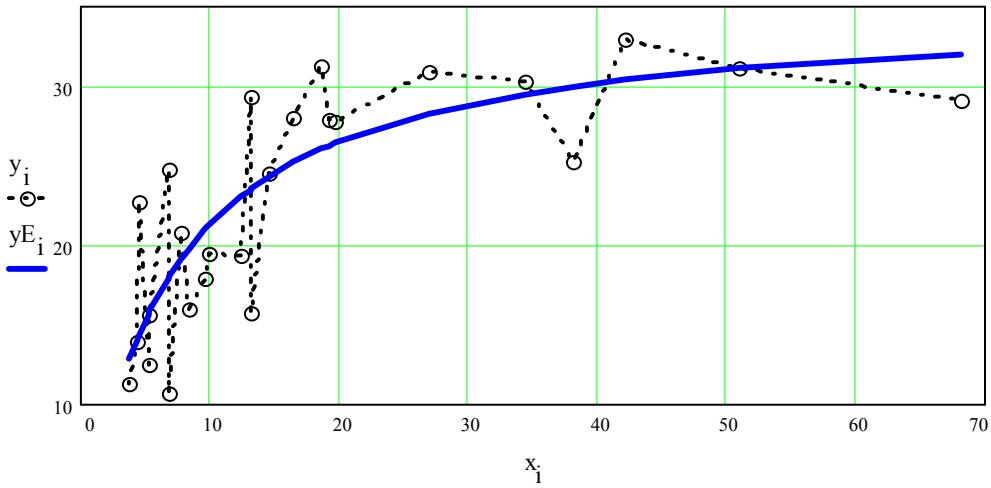


Figure 7

Source: Eurostat data, CIA World Factbook data and own computations (see also, Albu et al, 2016)

5. Perspectives on medium and long term

In this section of the study, we start by presenting a number of assumptions that then are taken into account to the building of forecast scenarios, as follows:

- The vision for economic development and quality of life in Romania on medium and long term is based primarily on EU membership, on the existence and development, according to background documents, of the strategies and policies that peg future dynamics.
- The Strategy Europe 2020 foreshadows what will be the place of Romania in EU. Therefore, the dynamics of macroeconomic indicators derived from Strategy goals is taken into account when we are formulating hypotheses and scenarios.
- In line with the targets for Romania in the Europe 2020 Strategy and a number of other elements derived from recent policies of the EU (such as the cohesion or absorption of funds allocated from the Community budget, the launch of the procurement widespread financial assets by the ECB, Quantitative Easing, or so-called Investment Juncker Plan), in the national convergence programme for the period 2015-2018 are presented in detail the dynamics of key macroeconomic indicators until near the end of the decade.
- Other studies and forecasts regarding the dynamics of macroeconomic indicators that we have had in establishing assumptions and development scenarios for future periods were those developed by the World Bank, IMF, OECD, European Commission, UN, ILO etc., using as time horizon 2020 for most macroeconomic indicators and even longer horizons for indicators of demographic dynamics.
- Our own studies on correlations between the main macroeconomic variables, estimated based on historical trends, tried to substantiating of assumptions and implications of scenarios proposed for future economic growth in Romania.
- Given the interest in estimating future position of Romania in EU, it was necessary in parallel to formulate assumptions and development scenarios for the EU economy.
- Depending on the basic assumptions necessary to build simulation models to estimate parameters that control the future dynamics were developed several scenarios. For instance, in relation to the degree of Romania's economic integration in EU, we defined two main scenarios: one assuming a medium speed of it integration in EU, reflected by the accession

later in the Euro zone (2022-2023), V1, and the other providing a higher speed of integration and an earlier accession in Euro zone (2019- 2020), V2.

- As much as the forecast horizon is extended and uncertainty is increasing, we were forced to consider less accurate assumptions and a smaller number of macroeconomic variables.

For a short horizon of time, up to 2020, our scenarios are based on two versions for the GDP forecast: one based on the Convergence Programme, referring only for the period 2015-2018, and other one that was developed based on statistical data from the IMF forecast, April 2015 (which in turn uses data from the OECD, World Bank and Penn World Tables), expressed in international dollars at Purchasing Power Parity (up to 2020), converted by us in euro PPS equivalent. According to the second version, in Figure 8 is presented the spatial distribution of GDP per capita in 2020 compared to 2000 as a percentage of average in UE28, as two stylized maps of the EU (were Cyprus, Malta and Luxembourg were excluded). The corresponding data (as GDP per capita in PPS; UE28=100) for years 2000, 2014 and 2020 are presented in Table 2.

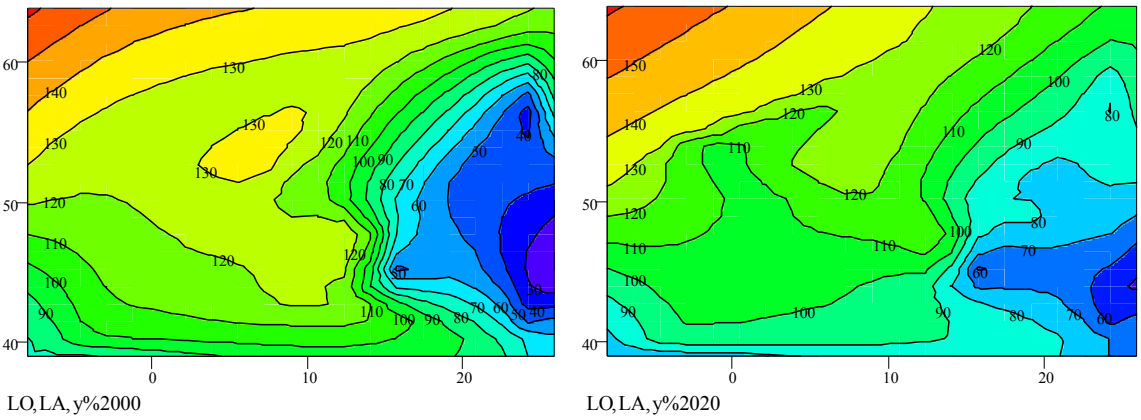


Figure 8

Source: Eurostat data for 2000, IMF forecast data for 2020, and own computations.

According to IMF forecast, data presented in Figure 9 show how the convergence between EU11 and EU15 will continue up to 2020 (this time data are as GDP per capita in PPP; UE28=100): EU11=46.9% in 2000 and 72.0% in 2020; EU15=115.3% in 2000 and 107.1% in 2020.

Romania has improved its position in the hierarchy of the UE28 on the absolute value of GDP (expressed in PPS): from 16th place in 2000, to 15th in 2001 (ahead of Finland), to 14th in 2004 (ahead of Denmark), 12th in 2007 (exceeding the Czech Republic and Portugal), 11th in 2010 (surpassing Greece) and the 10th since 2013 (when exceeded Austria). This position is expected to be improved after 2020, when the probability of exceeding Sweden and Belgium will become significant (for instance, after IMF forecast, in 2020 Romania's GDP in absolute terms will represent 94% of Sweden's GDP and 93% of Belgium's GDP). Rank 8 is likely to be the Romania's rank also at the horizon 2035 (the country on position 7th in 2020, the Netherlands, can not be exceeded at this horizon; for instance, in 2020 it is expected that the Romania's GDP to represent only 55% of the GDP of Netherlands).

Regarding GDP per capita in UE28 Romania advanced from the last position in 2000 to the 27th position in 2006 (ahead of Bulgaria).

Table 2

	2000	2014	2020 (est.)
Austria	130.5	125.2	119.1
Belgium	124.7	116.6	111.7
Bulgaria	28.5	44.9	46.9
Croatia	49.3	59.4	59.0
Cyprus	91.0	82.0	77.5
CzechRep	71.7	82.3	85.5
Denmark	130.7	122.7	123.7
Estonia	42.7	73.3	81.8
Finland	116.7	110.0	105.8
France	118.7	108.2	105.3
Germany	117.3	123.3	120.6
Greece	84.7	72.2	78.9
Hungary	53.2	67.4	70.7
Ireland	130.6	132.8	136.0
Italy	117.7	97.6	91.6
Latvia	35.5	63.4	72.1
Lithuania	38.1	73.9	84.4
Luxembourg	248.6	253.3	231.5
Malta	86.4	86.4	90.9
Netherlands	139.4	129.0	127.6
Poland	46.8	69.0	77.2
Portugal	78.8	77.7	76.0
Romania	25.4	55.4	67.5
Slovakia	49.4	75.4	81.5
Slovenia	79.0	82.3	82.9
Spain	96.5	93.6	96.0
Sweden	129.5	124.9	125.5
UK	120.7	108.4	108.2

Source: IMF data and forecast and own computations.

By 2020, according to estimates, Romania will perhaps exceed as GDP per capita (in PPS) only Croatia (in 2018). Given the estimated levels for EU countries in 2020, in view of the horizon 2035, Romania may exceed as the level of GDP per capita few countries, such as Hungary, Latvia, Portugal, Poland, Cyprus, Greece, Slovakia, Estonia, Slovenia Lithuania and the Czech Republic, whose estimated values for 2020 are below 30,000 euro (not so far from the level of 21,004 euro expected for Romania). Thus, in case of the most optimistic scenario, Romania may be placed on the 15th position in EU, which would mean a historic success for it. In Figure 10 is presented the evolution of the GDP per capita in Romania related to the EU average (as %) described by the two scenarios, V1 and V2.

Both scenarios suppose, as a precondition, the modernisation of economic structures. As prerequisite is the modernization of rural economic life and agricultural production, in order to strengthen the role of this sector in the overall development of the country but it will be a qualitative contribution and an important increase in productivity. The share of agriculture in GDP and especially in employment should be significantly reduced. As a consequence, the contribution of the tertiary sector and of the performing creative industries will increase.

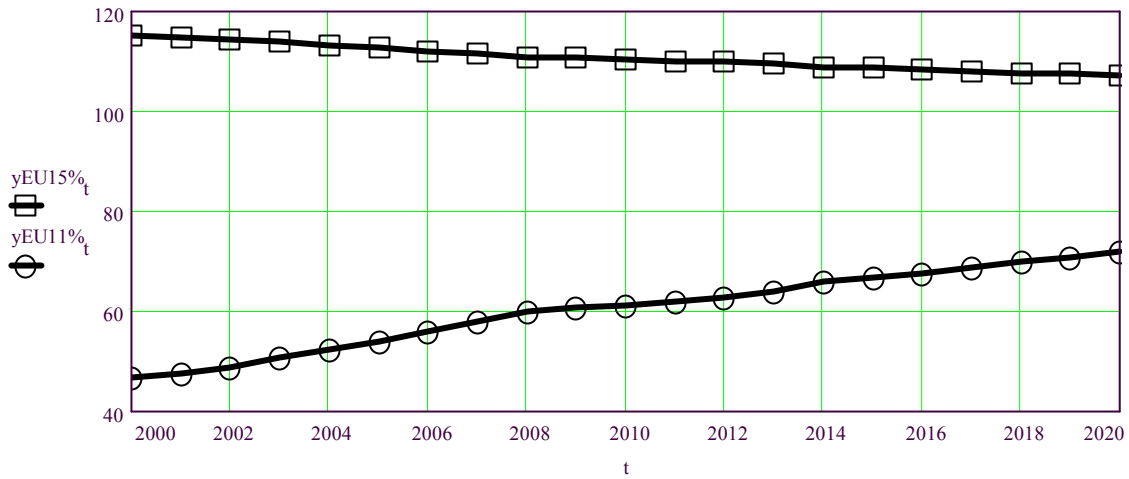


Figure 9

Source: Eurostat data for 2000 and 2014, IMF forecast data for 2020 and own computations (see also, Albu and Caraiani, 2016).

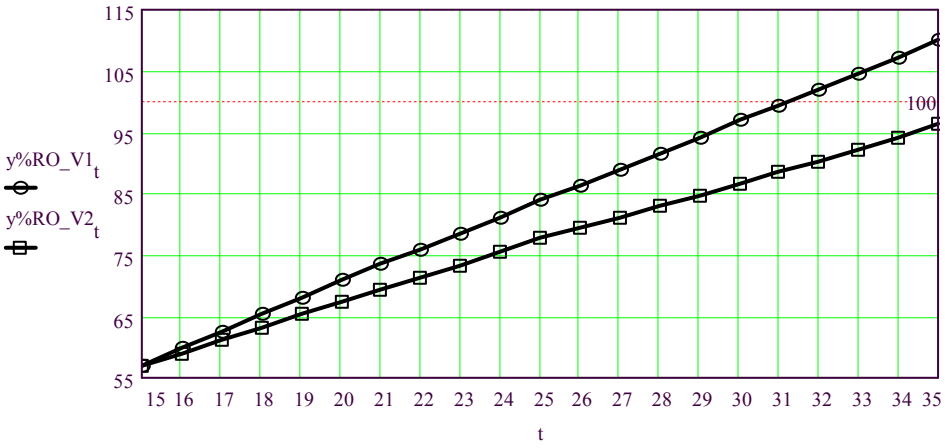


Figure 10

Source: Eurostat data and own computations (see also, Albu et al., 2016)

Sectoral targets should be compulsory since at present still there are large differences from the standard structure for a modern economy in EU. To illustrate such differences in case of Romania, in Figure 11 are shown the major changes in employment structure in EU for a long period (where the sectors are denoted by na% - agriculture, ni% - industry, and ns% - services). Moreover, in this Figure, using cross-sectional data, are shown the estimated trajectories for the three major sectors of an economy going in correlation with the growth of GDP per capita (all EU countries during the period 2000-2011 were considered; theoretical trajectories are noted as na%_E, ni%_E, and ns%_E) (details about the estimations models and methodology can be found in Albu, 2012 and Albu et al, 2012).

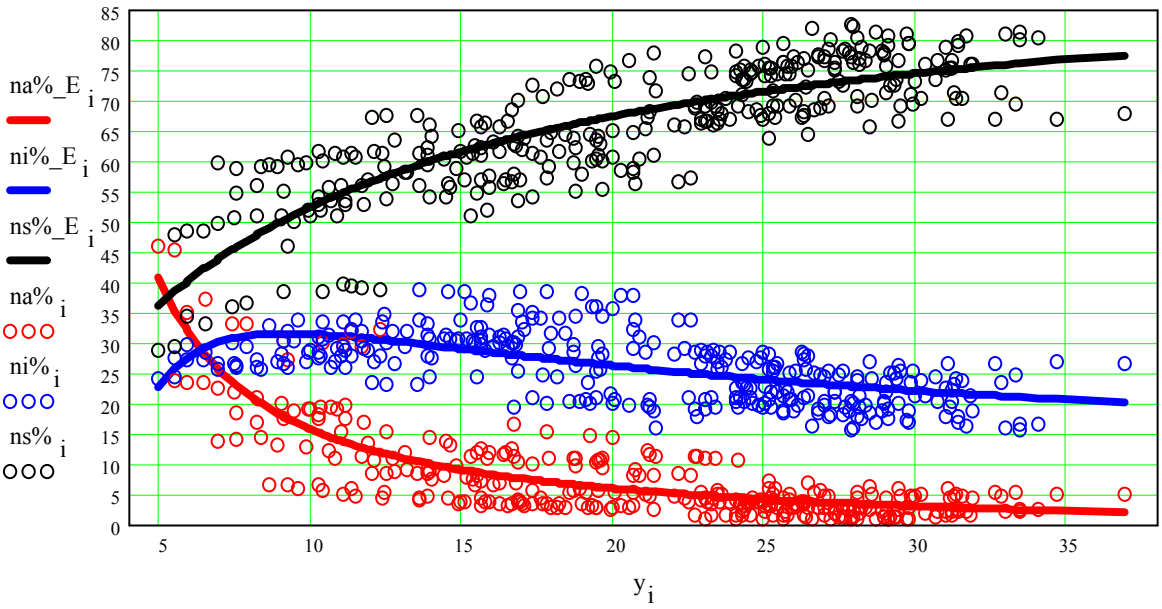


Figure 11
Source: Eurostat data and own computations
(see also, Albu, 2012, Albu et al., 2012, and Albu et al., 2016).

We can see, when GDP per capita is growing to higher values, how the share of agriculture in employment tend asymptotically to a value under 5%, and the share of services tend to a value over 75%. For instance, in 2014, the shares in employment and respectively in GDP of the three economic sectors in Romania were as follows (as %): agriculture - 27.9 / 5.4; industry - 28.2 / 27.3; services - 43.9 / 67.3.

Empirical data show that in case of high share of agriculture in employment, which generally denotes a weak level of economic development, labor productivity per person in this branch represents only a small fraction of the national average level of productivity. For instance, during last decade, in Romania the share of agriculture in employment was 28-30% (the highest value in the EU) and labor productivity in this sector represented only 19-22% of the average level of productivity in the whole economy (for comparison, productivity in industry was 96-117% compared to the national average and that of services 144-154%). In France, a country considered an agricultural power in Europe, the share of agriculture in employment was only 2.5-3% and labor productivity in this branch represented 56-69% of the average level of productivity in the French economy as a whole (for comparison, productivity in industry represented 87-91% of the national average, and productivity in services 104-105%).

Using published data, we estimated for the EU (excluding Malta and Cyprus) relationship (inverse) of the share of agriculture in total employment (na%, as the independent variable on the horizontal axis) and productivity in this sector as compared to the national average productivity (wa%, as a dependent variable on the vertical axis). Based on the estimates we built a theoretical function expressing the correlation between the two variables, wa% (na%), which is represented graphically in Figure 10. Also, on the chart there are marked the actual values of recorded variables for Romania, na%R and wa%R and respectively for France, na%F and wa%F (details about the estimations model and methodology can be found in Albu et al., 2012).

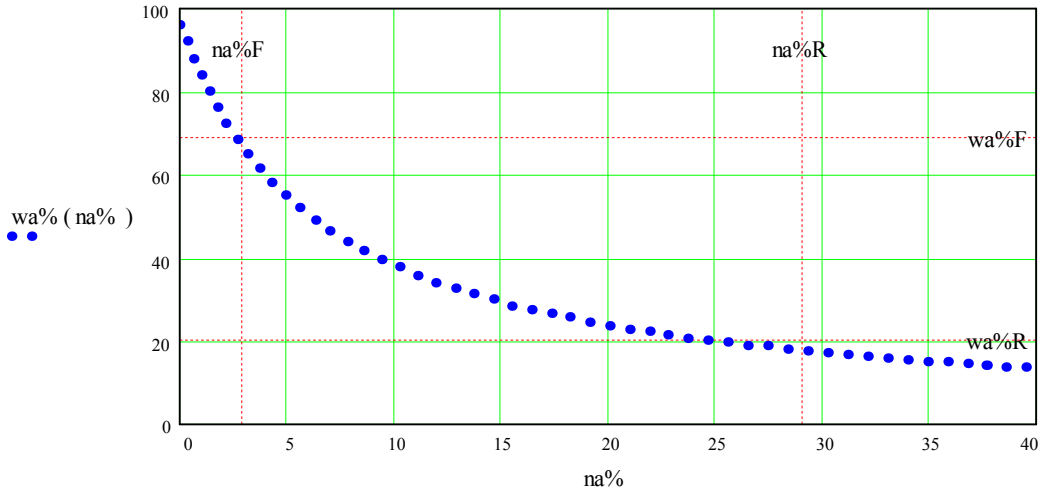


Figure 12

Source: Eurostat data and own computations (see also, Albu et al., 2012, and Albu et al., 2016)

Transition to a modern agriculture, while diminishing its importance in the national economy, will contribute decisively to reducing seasonal fluctuations, which affects currently the dynamics of GDP inside of a year, in Romania. Thus, against a backdrop of significant shares in GDP of agriculture, due to seasonal fluctuations there are large differences between levels of quarter GDP (the largest gap in EU). For instance, there are years when GDP in the fourth quarter is by a quarter higher then it is in the first quarter of the year. These fluctuations have a negative impact on the overall economic activity, on the planning of activities and budget exercise in a year, on the income received by a significant number of people, on the export activity, on transport and other services etc. Estimates for Romania show that the annual reduction with one percentage point in the share of agriculture in total employment could have the effect of supplementation with 1.1 percentage points of annual growth of GDP.

6. Conclusions

After 2000, a significant general convergence was demonstrated in EU. However, there opposite tendencies inside Eastern group of countries and inside of the group of old members in EU. Moreover, by analysing deeper, at the regional level, inside of each country from EU11 generally has been manifested a strong divergence process. At least after 2000, this could be explained by the following rule: there are two opposite forces in matter of regional convergence inside of a country, depending on the part in which the country is located related to the average GDP per capita at the level of EU or equivalent against the value 1 of the ratio between the average GDP per capita in a country and the average GDP per capita in EU. In case of countries located on the left side, when their GDP per capita increase faster than the average EU level, as a rule, the regional divergence will register. In case of those located on the right side, when their GDP per capita increase slower than the average EU level, a regional convergence predominates.

According to the proposed scenarios (built in line with the theory of economic growth and convergence and based on empirically demonstrated correlations after 2000 in EU), Romania could be placed on a better position in EU at the horizon 2035: rank 8 as economic power (GDP in absolute terms) and around rank 15. In the same time, a structural convergence will be achieved in Romania, comparing to the predominant economic structure in EU.

Acknowledgment: *In this paper we used few results already published under a project of the Romanian Academy, "Strategia de dezvoltare a Romaniei in urmatorii 20 de ani" (project 6), and few results already published under a project supported by a grant of the Ministry of National Education, "Non-Linear Modeling of the Impact of the Crisis on the Interactions among Financial Markets and Macroeconomic Variables in CEE Count", CNCS – UEFISCDI, project number PN-II-ID-PCE-2012-4-0631.*

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THE EUROPEAN DEBT CRISIS AND THE CHALLENGES TO THE BANKING SECTOR IN BULGARIA

Iskra CHRISTOVA-BALKANSKA[2]

Abstract

European Sovereign crisis fostered the consolidation and the supervision on European banks financial institutions. Practical steps have been undertaken towards strong regulation at EU and at national level. In some way, Bulgarian banks did not fell the European sovereign debt crisis. The banks had a comfortable liquidity buffer, and did not experience liquidity shortages in the last years. The banks succeeded in clearing loans portfolio and to monitor the rising of risks costs. Despite the difficult economic and financial environment, Bulgarian banks remained stable, liquid and well capitalized, well above the regulated minimum of capital buffers of 13.5%.

The banking sector (with the exception of CCB) announced the net profit of 373 million euro in 2014, with 80.5 million euro more than in 2013. Even the collapse of CCB did not significantly change the stability of the banking system.

However challenges for Bulgarian banking sector remained as economic growth continued to be slow, which in turn limited the growth of loans and non performing level. After CCB collapse, concerns have rising regarding the asset quality in the banking sector and the reliability of the financial sector. Collapse of CCB increased doubts about banking and reporting practices and the adequacy of the Supervision of BNB over banks, since it became evident that the proper valuation of bank assets needed to be revised.

Keywords: economic growth, economic convergence, catching up process, EU structural Funds

JEL Classification: F15,F21, F63

Introduction and main goals

European sovereign debt crisis affected severely financial and economic stance of heavily indebted euro zone countries. So the gaps in the banks balance sheets were to be helped by the State and the international organizations. The European Central Bank (EC) proceeded towards important changes in EU monetary policy in order to counter the increasing fragility of the European Banking sector and to resolve in some way the sovereign debt crisis. Theses processes were supposed to affect also EU countries non members of the euro area. Therefore the first goal of the article will be to explain how the European sovereign debt crisis disrupted economic and financial stability of the euro zone. And the second one will focus on the influence of the debt crisis, if any, on Bulgarian banks' behavior.

The European Sovereign Debt Crisis – implications on EU countries financial and economic recovery

The European Sovereign Debt crisis has been the result of the impact of many complex factors. One group of factors were related with the effects of financial globalization, the failure of financial regulations since the 80s, the deepening of banks' transactions with securitized financial instruments (credit derivatives), and with an easy access to credit lines, especially after 2000. All this tempted the international universal banks to engage deeper and deeper in some risky and no transparent lending operations on the capital markets. Other group of reasons embedded in the very same philosophy and practical implementations of the Economic and Monetary Union (EMU) (according the Maastricht Treaty of 1992) under which EU member states were obliged to conduct single monetary policy with a common currency, but they reserved themselves the right to implement a fiscal policy according their own political views and decisions.

However the 3% of the GDP budget deficit (under the Maastricht Treaty) for a number of euro zone members became difficult to respect since 2000 the threshold of budget deficits.

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Trough the combined application of financial techniques, including balance sheet accounting, structured currencies loans and credit derivatives, EU countries with higher indebtedness tried to reduce the debt burden. Despite the efforts, the financial crisis (2007-2008) and economic downturn accentuated significant deterioration in the public finances in EU countries with high debts.

The European sovereign debt crisis begun with the collapse of Iceland's banking system. and it spread to EU South European countries. Greece was particularly vulnerable since Greek public debt revealed to be much higher than the officially declared data. For example Spain's sovereign debt before the onset of the crisis was roughly the same as Germany's as a percentage of economic output, but Spain had high unemployment rate and with no signs of fast economic recovery, and its banks liquidity deteriorated.

The states that were adversely affected by the crisis faced a strong rise in interest rate spreads for government bonds as a result of investor concerns about their future debt sustainability. The long-term interest rates of Greek government bonds with maturities of close to ten years on secondary market increased from 5% (October 2009) to near 30% (January-November 2011) and to more than 27% (September 2012).

It was estimated that Germany have made more than 9 billion euro out of the crisis as investors preferred to acquire safe bonds even at near zero interest rate as German federal government bonds. By July 2012 also Netherlands, Austria, Finland benefited from zero or negative interest rates. Belgium and France benefited from short term government bonds with a maturity of less than one year.

Countries with high sovereign debts had difficulties to raise fresh financial resources at affordable rates in the capital markets. At the same time, banks in many of the indebted countries had come under pressure, as bank deposits have fled to countries with stronger economies. In many of the indebted countries, their banks have been much larger in size given the large volume of cross border financial transactions, than the financial potential of their own economies. Governments lack fresh financial resources to refinance the banks in shortages of liquidity.

Concerns arose about the European banking system because of the persistent imbalances between the euro zone countries. Indebted countries were forced to search for a financial assistance from third parties and especially from the European Central Bank (ECB). In 2010, the EU, the ECB, the euro zone countries and the International Monetary Fund (IMF) took rapid action to provide with fresh financial resources countries, experiencing difficult financial position.

One of the measures taken was the establishment of European emergency measures specifically for the eurozone. They were used to provide assistance programmes for Greece, Ireland, Portugal, Spain and Cyprus. In 2010, seventeen eurozone countries created European Financial Stability Mechanism (EFSM), which was a first line of an emergency fund and was set up to contribute for avoiding the spread of contagion of sovereign debt crisis throughout Europe.

The European Financial Stability Facility (EFSF) was the second rescue fund delivered for the euro zone. This fund was intended to provide financial assistance to euro zone member states that had lost access to the capital markets and to cover their financial shortages. The Emergency measures were used to provide assistance programmes for Greece, Ireland, Portugal, Spain and Cyprus. Conditional and structural reforms had to be implemented by countries receiving the loans. The financial assistance programs were coupled with requirements for the implementation of severe austerity measures of reducing public expenses.

On May 2, 2010, the first Greek bailout package amounted at 110 billion euro was provided by EU and IMF to help the Greek government to pay its creditors. On July 21st, 2011 a second rescue package was granted with a total volume of 130 billion euro under the same conditions for the implementation of another set of austerity measures.

Followed Greece, Ireland reacquired a bailout in November 2010, with Portugal next in May 2011. Italy and Spain were also vulnerable, with Spain requiring official assistance in June 2012 along with Cyprus. By 2014, Ireland, Portugal and Spain, due to various fiscal reforms, domestic austerity measures and other unique economic factors, all successfully exited their bailout programs requiring no further assistance. The road to full economic stabilization was still underway. Cyprus, too, reported a slow but steady ongoing recovery, averting further financial crisis thus far.

On June 2012 euro zone member states took decisions to assist European banks shaken financially by the sovereign debt crisis. Loans were provided by the European Stability Mechanism directly to the banks in order to avoid an increase of sovereign debts, and this credit line was also approved by the European Central Bank (ECB). This reform immediately reflected positively in yields of long term bonds issues of Italy and Spain which started to decrease. At the end of 2011 and 2012, ECB provided to EU banks loans with a maturity of 3 years for recapitalizing the banking system. (1000 billion euros increased by around 500 billion euro balance sheets of euro zone member states' central banks). The liquidity injections gave impetus to activate Government bonds market.

By the end of 2012 ECB acquired 280 billion euro of debt bonds under the program of recapitalization and as a consequence its balance sheet increased by 9%. The long term refinancing operation increased undoubtedly the credit risk of ECB operations, given that European banks had little opportunities to start servicing their debts and that the economic recovery in the euro zone countries continued to be morose.

Indebted countries were obliged to implement a set of combined quantitative and qualitative monetary policy instruments. Non conventional monetary policy instruments (quantitative easing "QE") have been used in order to stabilize the economic and the financial situation. The Central bank implemented "QE" by purchasing financial securities from the commercial banks and other financial institutions, and aimed to raise the prices of financial assets, to lower their yields and to increase the money supply. This monetary policy differed from the well known monetary policy of open market when for keeping the target of inter bank interest rates, the central bank purchased or sold short term government bonds. Though, when short term interest rates approached low levels, the "QE" was not quite effective and monetary authorities preferred to use "QE" for stimulating economic growth by purchasing long term bonds. Thus they decrease long term assets interest rates and tried to influence the level of yields. Debts were converted into fresh financial resources through the financial institutions.

The purchase of government bonds was proportional to the capital allocation of each euro zone member states in the ECB. However, smaller amounts of the delivered sums have been dedicated for Greece, considered as a very vulnerable economy. Risks minimization under this program was estimated at 20% of the awaited decrease of risk factors.

The decline in long-term interest rates of debts instruments at the markets in the indebted countries was uncertain and as a consequence, it was a signal that capital markets have not reacted tangible (at least currently) in response to applied monetary policy.

German officials were concerned that implementing policies of monetary relief could adversely affect the restructuring of EMU economies. However, for avoiding risks of incurring possible losses by the ECB, Bundesbank supported the purchase of debt bonds by central banks. A unanimous conception prevailed that the purchases of Greek debt securities could be canceled, if the political situation in Greece worsened and did not comply with policies advised by the main creditors of Greece.

A change in monetary policy has been implemented in the euro zone in March 2015 and in September 2016. ECB started to acquire 60 billion euro per month. ECB officials expected that with the purchase of 1.1 billion euro it will be possible to restore the ECB balance sheet at the 2012 levels. ECB took upon itself the task "to determine the interest rates depending on the objectives of monetary policy towards price stability".

The shift of ECB policies towards restructuring its balance sheet will give reason to strengthen financial and economic stance of European banks and the euro zone as a whole. First, the credibility of ECB will be restored and increased. Second, the decrease of the exchange rate of the euro will be a good precondition for the further amelioration of euro zone countries trade balance and especially to increase the export. Third, It will have a positive impact on economic recovery, fostering economic recovery and decreasing unemployment. The impact on the interest rate by ECB policies is awaited to influence positively opportunities for lending to business and to influence price level.

Now, ECB interest rate continued to be at its lowest levels. The interest rate on the main refinancing operations (MRO), which provide liquidity to the banking system, the rate on the deposit

facility, which banks may use to make overnight deposits, the rate on the marginal lending facility, which offers overnight credit to banks from the Euro system at December 9 2015 were as follows of 0.05%, (-0.30%), and 0.30%. ECB continued to limit the rate of refinancing operations to banks (LTRO).

The European sovereign debt crisis revealed that a deeper integration of the banking system was needed. A single rulebook was formed for all financial institutions in EU 28 Member States. The single rule book was the foundation on the Banking Union. On the basis of the European Commission roadmap, the EU institutions established a Single Supervisory Mechanism and a Single Resolution Mechanism for banks. With Single Supervisory Mechanism (SSM) (from October 2014) a new system of financial supervision was introduced by ECB and by EU monetary authorities. The objectives of SSM were to provide security and stability of the European banking system and to strengthen European financial integration in Europe.

Non euro area EU member states received the right to participate in SSM activities, although they were obliged to cooperate closely with ECB and to conclude a Memorandum, in which they are explaining how the cooperation will be achieved under the mutual task of supervision. ECB concluded Memorandums with every one of EU country, where there are headquarters of at least of one world most famous and important monetary and financial institution.

ECB introduced strict criteria for the assessment of risk assets. On March 2014, ECB launched stress tests on European banks. Main requirements were to increase the proper bank capital (equity), which was an additional buffer for the protection of banks from bankruptcy. At the end of 2014, ECB introduced “Asset Quality Review”. For each granted loan, banks were obliged to increase the amount of risk-weighted assets (RWA). This figure was 12% in Bulgaria and 8% in the euro area.

According OECD data, about 200 banks in the euro zone needed to attract 400 billion USD to cover the level of leverage. The fact that European banks must increase equities was supposed to affect negatively their market values. As of April 2014, the negative effects of the sovereign debt crisis decreased and Euro banks liquidity position improved. The monitoring of 137 euro zone financial institutions showed the followed results: The pressures exerted by the sovereign debt crisis were reduced (-8% from 5% end-2013). The direct exposures to sovereign debt were reduced (-11%, -7%).

Banks’ exposures to Government bonds comparatively decreased, which contributed to the easing of credit standards, especially mortgage loans (-3%, -2%).The easing of the criteria for lending to business ameliorated (1%, 2%) due to the relative positive changes in the value of securities used for collaterals by banks. Consumer credits and other lending to households (2%, 0%) also showed signs of increase. (Eurobank lending survey).

The European debt crisis and Bulgarian banks

Bulgarian banking system withstood well at the European sovereign debt crisis because of: the comparatively lower technical level of offered financial services, and the very low trade with synthetic financial instruments and derivatives. The Bulgarian banking system was not affected either by the sharp drop in capital inflows nor by the increased financial costs in the euro zone. The drop in liquidity of international banking market influenced negatively the funding of foreign banks, localized in Bulgaria.

As a result, Bulgarian banks with domestic capital expanded their operations and their market share at the domestic Bulgarian market increased. The increase in size and financial strength of Bulgarian banking sector was due to the enlargement of the private sector in the economy, which increased the demand for credit, and the competition between banks to attract clients. The consolidation of banking capital increased.

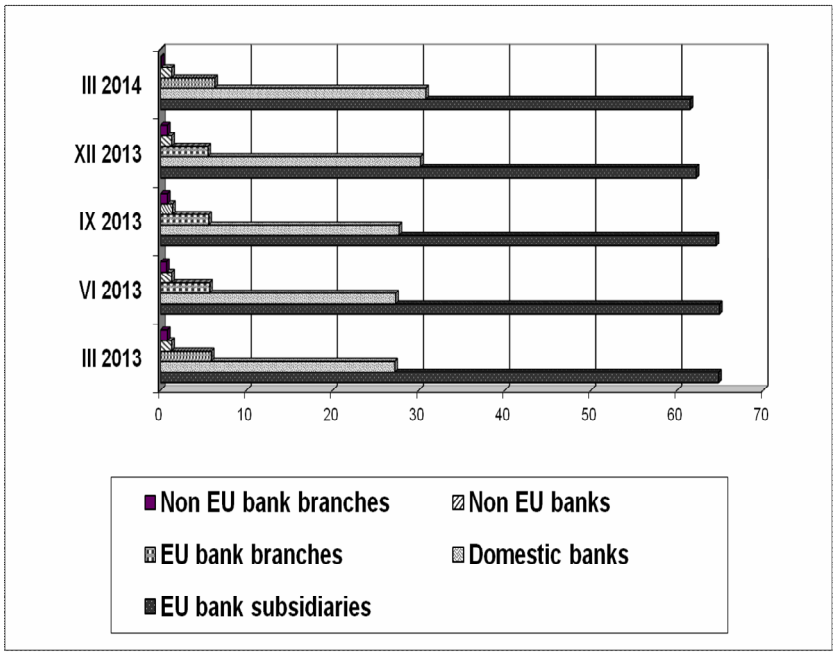

Fig.1 *Market share of domestic and foreign banks in Bulgaria (in%)*

Source: Bulgarian National Bank

The average annual rate of expansion of domestic banks amounted to 17.6%. Three domestic banks increased their loan portfolios by 22.5%. As a result, the share of domestic banks in total loans increased from 14.9% (March 2010) to 24.8% (March 2014) (16.8% in early 2008). Four domestic banks grew at an annual rate of over 10%, while foreign subsidiaries developed more moderately. The Corporate Commercial Bank (CCB) grew by 2.3 % per year.

The average annual rate of total loans and advances allocated by the Bulgarian banking system (between the First quarter of 2010 and First quarter of 2014) amounted to around 3.5%. The expansion was not the same for all Bulgarian banks. Greek banks decreased their market share by 0.9%, while the subsidiaries held by other EU banks increased their market share by 3.7%.

The debt crisis in Greece had no a real negative impact on Greek subsidiaries, which were located in Bulgaria. Subsidiaries of Greek banks in Bulgaria did not have exposures in Greek private or government securities. The relative share of Bulgarian banks reached 30.8% (March 2014). The market share of EU subsidiary banks decreased to 61.5%. Market fragmentation was high, since the 3 largest banks hold about 80% of the market. During the global financial crisis and European sovereign debt crisis, fresh financial resources have been transferred from foreign banks located in Bulgaria to their headquarters situated abroad.

Table 1

Indicators of the banking system as of September 2014.

	Banks with Bulgarian capital	**Banks total**
Total assets, million Euros	**12.613**	**45.302**
Increase since December 2009,(In %)	**113.3**	**24.9**
Net credits and claims million Euros	**8.797**	**34.572**
Increase since December 2009, (%)	**102.7**	**16.8**
Households deposits million Euros	**10.382**	**38.005**
Increase since December 2009, %	**101.6**	**22.2**
% of the total assets	**82.3**	**83.9**
Equity, capital adequacy	**12.5**	**16.0**

Source: Bulgarian National Bank

The table shows clearly that the total assets of banks with Bulgarian capital increased since the end of 2009 significantly, and the same trend was valid for households' deposits and net credits, offered by Bulgarian banks.

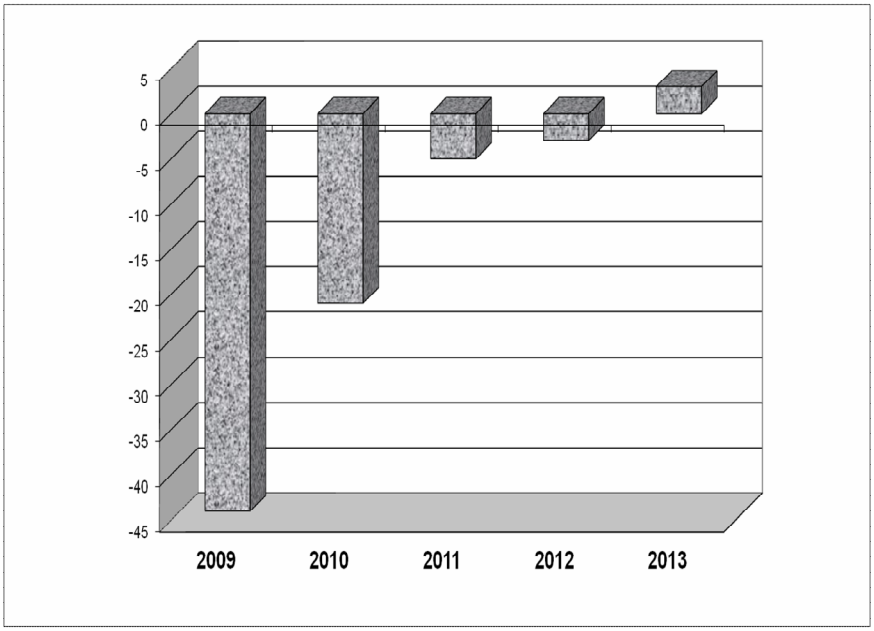

Fig. 2. *Net profit of banks in Bulgaria. In %*

Source: Bulgarian National Bank

In 2009, profits of Bulgarian banks decreased by 45%, but thereafter banks stabilized their benefits and towards 2013 profits started to increase, because of the applied aggressive banks' policies and by experiencing different techniques and channels to increase their profits.

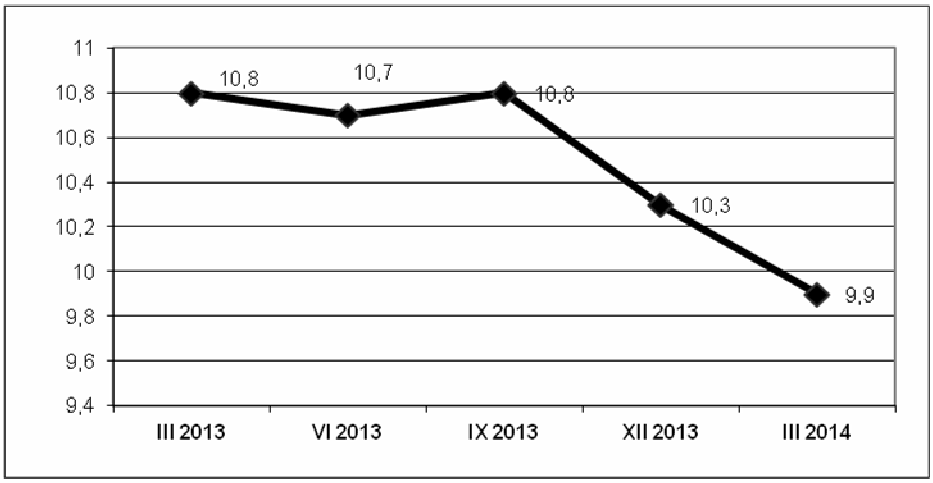

Fig.3*. Share of net non performing loans in total net loans. In%*

Source: Bulgarian National Bank

As of October 2013 non-performing loans over 90 days were 10.66% in the loan portfolio of banks, compared with 10.62% at the end of 2012). As of March 2014 classified exposures were reduced by 1 7%, compared with the end of 2013.

Notwithstanding this apparent bank stability, it was not convincing. At the end of June 2014, the Corporate Commercial Bank (CCB) and the Corporate Bank Victoria were placed under special supervision and that event fundamentally shook the confidence in the Bulgarian banking system. Bulgarian central bank (CB), which was responsible for the supervision of the CCB, was not sure how to proceed: whether to nationalize the bank with taxpayers' money or to search foreign investments for recapitalizing the vulnerable financial institutions. The insolvency procedures of the bank could not begin immediately due to number of legal obstacles. In CCB remained blocked 4

billion euro. BNB (BNB) revoked the license for the implementation of bank activity (in early November 2014) of CCB, after that an acute shortage of equity was found. CCB bankruptcy hit hardly number of Bulgarian companies and individuals. Over 80,000 jobs were probably closed because of the collapse of the CCB in November 2014.

First investment Bank (FIB), the 3rd largest bank in Bulgaria and the largest bank with a majority of Bulgarian capital also suffered of liquidity shortage and requested financial assistance from BNB. A credit line was allocated to FIB at the amount of 1.65 billion euro, approved under the State aid rules and the European Commission (EC). The EC approved the aid for FIB.The official monetary authorities used this clause and deposited 0.6 billion euros in FIB for five months. According this rule such a credit line can be allocated to all Bulgarian banks. The question remained why such an aid was not granted to CCB?

On the onset of the crisis, especially after thawing of the competition between banks for clients in 2009-2010, the volume of households and business savings in banks had steadily increased. Meanwhile, the bank lending, "frozen" during the crisis, was still at a low level, despite some attempts by financial institutions to stir the market. The increase in banks' deposits base helped high liquidity maintenance of the banking sector and repayment of deposits to clients after December 2014, which was blocked for a year in CCB. It further increased the available liquidity of banks. Thus, the liquidity of the banking system increased permanently, according to BNB and in January 2015 reached 31.78% (30.12% a month earlier).

Low ECB interest rates affected the Bulgarian inter bank market. If in the near past, the foreign banks brought out part of the surplus liquidity in their headquarters, now because of the ECB near to zero interest rates, the headquarters of banks deposited resources in its subsidiaries, localized in Bulgaria. Then banks in turn invested the liquidities in BNB. It remained more profitable for banks to keep liquidity in BNB at near to 0% interest rate. Thus the banks tried to sustain relatively the ratio between credits and deposits instead to send surplus funds in the headquarters at negative profitability. At the end of 2014 the total banking sector ratio of credits to deposits amounted to 84.78% (BNB).

Conclusions

European Sovereign crisis fostered the consolidation and the supervision on European banks financial institutions. Practical steps have been undertaken towards strong regulation at EU and at national level. In some way, Bulgarian banks did not fell the European sovereign debt crisis. The banks had a comfortable liquidity buffer, and did not experience liquidity shortages in the last years. The banks succeeded in clearing loans portfolio and to monitor the rising of risks costs. Despite the difficult economic and financial environment, Bulgarian banks remained stable, liquid and well capitalized, well above the regulated minimum of capital buffers of 13.5%.

The banking sector (with the exception of CCB) announced the net profit of 373 million euro in 2014, with 80.5 million euro more than in 2013. Even the collapse of CCB did not significantly change the stability of the banking system.

However challenges for Bulgarian banking sector remained as economic growth continued to be slow, which in turn limited the growth of loans and non performing level. After CCB collapse, concerns have rising regarding the asset quality in the banking sector and the reliability of the financial sector. Collapse of CCB increased doubts about banking and reporting practices and the adequacy of the Supervision of BNB over banks, since it became evident that the proper valuation of bank assets needed to be revised.

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ECONOMIC THEORY AS PRAXEOLOGY

Emil DINGA[3]

Abstract

The paper aims to deliver a logical and epistemological demonstration for the economics statute inside the social sciences. In my opinion, economics is not a science because it doesn't verify the criteria of scientificity, as this concept is generally accepted. The demonstration is based on sufficiency predicates of cognition and scientificity, respectively. More general, I think no social discipline is a science. Some of them are hermeneutics, some are praxeologies, and some are ethics. Economics seems to be a praxeology.

Keywords: cognition, scientificity, praxeology, sufficiency predicates.

JEL Classification: B40, B50, O10, Z10.

1. Cognition

Cognition (Knowledge) is a state of a cultural subject which has perceptions or representations inter-subjectively validated (i.e., it implies at least two subjects, either cultural or non-cultural[4], being or not contemporary), about the reality (either objective or subjective[5]). Principled, the possibility of cognition is presumed to verify four sufficiency predicates:

- (CS) *existence of a cognitive subject* (either cultural or non-cultural)

  -in the case of cultural subject: capable of perceptions and representations
  -in the case of non-cultural subject: capable only of perceptions

- (O) *existence of an opinion* of the cognitive subject about reality (usually, about a criterial space-time segmentation – CSTS – but not about the reality as a whole[6])

  -in the case of cultural subject: the opinion is signalized to other such subjects based on a symbolic code formally appropriated
  -in the case of non-cultural subject: the opinion[7] is signalized to other such subjects based on a non-symbolic code empirically appropriated

- (TO) *truth of the opinion*

  -in the case of cultural subject: established either by a logical (i.e., non-penalizing) or practical (i.e., penalizing) verification
  -in the case of non-cultural subject: established by a practical (i.e., penalizing) verification

- (GP) *invocation of a grounding principle for opinion*

  -in the case of cultural subject: is a principle emerging from the (a priori) rationality/intelligibility

  -in the case of non-cultural subject: is a principle emerging from the (a posteriori) surviving test

So, formally, the cognition (the knowledge) can be defined as:

$$K = (CS) \wedge (O) \wedge (TO) \wedge (GP)$$

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[4] The cultural subject is capable to have both perceptions (grasping of the altered exclusively in the presence of the perception source) and representations (grasping of the altered including the absence of the representation source). The perception is a subjective form of a sensation. The sensation is an impress of the natural sense organs of the subject, when the sensation source is an objective reality.

[5] As it is well known, there is a concept larger than the existent, namely the *done*, which contains, besides the reality (either objective or subjective) the imagery generated by the cultural subjects (see also **Heidegger**'s position in the matter).

[6] However, an opinion about the reality as a whole is not prohibited: so, all the metaphysics (including the religious myths) are opinions about the All.

[7] Of course, the term opinion is, in this case, of a metaphoric nature.

2. Scientificity

The scientificity is a predicate, i.e. a property, an attribute a something: thing or a relationship among things.

Firstly, the scientificity highlights only the theoretical aspect of the human action (or activity). So, we don't search to identify this predicate neither in the hermeneutic action nor in the practical[8] one. Since a single type of human action remained, the theoretical type, we can say the scientificity addresses the theoretical action of the human being (the figure 1 shows the abstract structure of the human action). This means the scientificity could be (or is, after the case) a property if and only if it is associated to the human action which is focused on the relationship object-object[9]. In the other two cases of the human action, the scientificity invocation itself (no matter if the property in case is or is not identified) is lack of sense (it is…illegal). This positioning shouldn't be interpreted inside a narrow positivism (neither absolute nor relative) because we haven't ask neither the factual testability of the propositions describing the property in case, nor the validity (both as logics, or as grammaticality) of forming the propositions.

Secondly, the scientificity is a property assignable only to the non-singular phenomena, so it is a contradictory property with the synchronicity one[10]. In other words, the repeatability of the phenomena (either periodically or not) is a sine qua non logical condition to ensure that the scientificity examination have sense. This „conditionality" of the signification sphere of the scientificity property from the non-synchronicity of the phenomena is crucial for the next discussion of the paper, because, as we will know, the identity of different temporal or spatial versions of the economic phenomena (more generally, social phenomena) is extremely problematic.

Thirdly, the scientificity is a property assignable only to the phenomena publicly and independently observable by an observer (subject). This two restrictive conditions (public observability and independent observability) are extremely important for a rigorous, complete and consistent (i.e., non-contradictory) treatment of the scientificity parameter. By publicly observable phenomena we will understand those phenomena[11] which can be observed, registered and experienced[12] by a least two cultural subjects. The phenomena that are object for a single observer experience are out of the scope of scientificity. For example, a religious experience signifies a singularized feelings, and the same is about an artistic feelings. In the last two cases, as many subjects experience such

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[8] We make a distinction between the practical action and the praxeological one: while the practical action is focused on the subject-subject relationship (for example, the political action, or the religious one), the praxeological action is focused on that action which is aimed to change the state of the world. Of course, there is some semantically overlapping: for example, a change of a world which is made through relationships subject-subject (so, a practical action) is, in the same time, a praxeological action (according to the definition delivered above.

[9] So, we understand also that the human action related to the relationship object-object develops in so called **von Newmann** conditions, i.e. the theoretical action of the subject doesn't disturbs neither the object directly examined, nor its relationship with other object. The special situation in the quantum mechanics (**Heisenberg**'s imprecision relationship) is, probably, an intrinsic property of the relationship object-object; even it is identified only through a measurement experiment, so it cannot be considered as a perturbation of the object by the subject.

[10] The synchronicity is an essential property of those phenomena which happen only once (either in a necessary way or in a contingent one). The uniqueness of the phenomenon withdraws it from the scientific sphere, so it is equally a lack of sense to talk about the scientific (either by accepting, or rejecting it) related to such a singular phenomenon like to talk about the scientific of the phenomenon that do not addresses the relationship object-object.

[11] We use the term of phenomenon in a generic signification: things, events, processes, so any change happened inside the world.

[12] Here we do not make the usual distinction between experience and experiment (the distinction takes into account at least two parameters: a) the time type – a laboratory time for experiment, and a clock time for experience; b) the intentionality involved – the absence of intentionality in the case of experience, and the presence of intentionality in the case of experiment).

phenomena, as many distinct phenomena exist, but to put the question of their scientificity is lacked of sense[13]. By independently observable phenomena we will understand those phenomena for which their observation by a subject doesn't constraint their observation by another subject, nor in the sense of provoking the observation, nor in that of changing it. If we will take again an example from the artistic field, then if a perfect empathic capacity of an artist is presumed[14], we cannot yet speak about scientificity, because the observer has experienced the artistic phenomena depending on the artist[15].

Fourtly, the scietificity is a property assignable only to phenomena about which some propositions (in a verbal form[16] and inter-personally communicable) are enacted. The possibility of interpersonal communication (either among contemporary persons, or among non-contemporary ones) is a sufficiency condition for the existence of the scientificity property[17] (as we already said, the emotional feelings – religious or artistic – are not inter-personally communicable so, at least in their original versions, don't put the scientificity question).

So, if we note:

- S_C: the sufficiency predicate named *cognitive*
- S_R: the sufficiency predicate named *non-singular*
- S_{PI}: the sufficiency predicate named *publicly and independently*
- S_P: the sufficiency predicate named *propositionally enactable*

so, the scientificity, as parameter (i.e., as composed predicate) could be described as follows:

$$S = [(S]_C) \wedge [(S]_R) \wedge [(S]_{PI}) \wedge [(S]_P)$$

Where

$\wedge$ is the logical constant of conjunction)

As a diagram, the scientificity can be represented as follows (figure 1)

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[13] So, we will accept we have phenomena out of the scientific scope whenever we can think a bijective relationship between the set of phenomena in case and the set of subjects which experience those phenomena. And, of course, inversely, if we have a phenomenon which can be associated to at least two subjects who experience them, then that phenomenon will be „decreed" as „suspect" for a scientific analysis. To be noticed that, form a logical point of view, it is not necessary to have a simultaneity (and not even a contemporaneity) of experiencing the same phenomenon by two subjects.

[14] That is, the same feeling of the artist and of the observer of the art outcome is presumed (or, more, the same experience for the two participants is presumed).

[15] Here a very difficult issue connected with the quantum mechanics arises, more exactly, **Heisenberg**'s imprecision relation arises. There are some interpretations according which this imprecision in measuring the infinitesimals is generated by the measuring action itself, i.e., by the observer. So, because the observation is not independent from the observer (even the dependence is produced by the observer itself, i.e., we have an auto-dependence) we cannot speak about scientific. However, there are other opinions that assert this imprecision are of objective nature, saving again the scientific of the quantum mechanics (NB: but, how can we factually demonstrate, this objectivity of the imprecision, when we need to make this, for an observation?).

[16] The verbal form of a proposition can be both of the natural language type, and of artificial language (for example, a mathematical or logical languages) type, because in the two cases we have the sufficient components of a language: a) a set of alphabetical signs; b) a set of syntactic rules to form „words" and „propositions"; c) a set of semantic correspondences (between the signs and their references). In the most cases, there is also a set of rules for the pragmatic correspondence (between the signs and the users of them).

[17] In our opinion, **Wittgenstein**'s recommendation: do not speak about the things which are not possible speak about, essentially addresses this sufficiency condition of the scientific. The consequence is that we cannot properly speak than about things which can be associated with the property of scientific. In fact, about other things we do not speak but we only enact opinions which are not possible neither for critics nor for revisions, being pure monologues vocally uttered. Of course, is not lacked of interest to examine such „speaks", i.e. to examine if by enacting these opinions an effect is produced on other persons (contemporary or not). What is sure here is that the opinions are of either hermeneutical or practical nature?

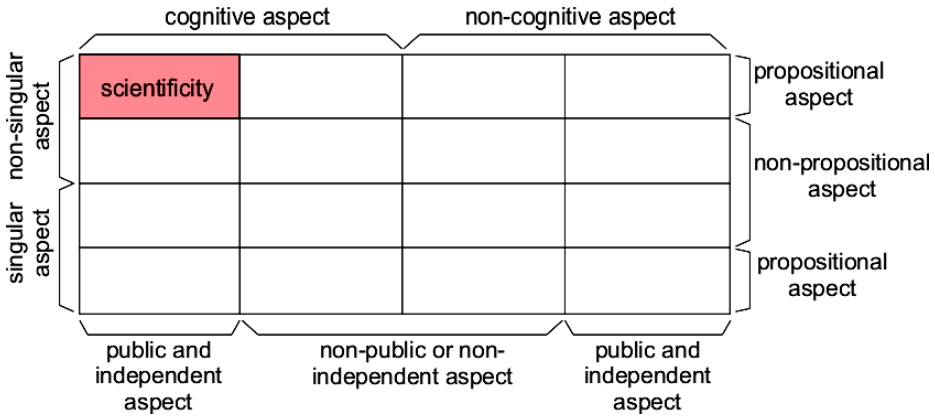

***Fig.1**. Scientificity implies the conjunction of four sufficiency predicates*

In fact, we can have a strong scientificity, or a weak scientificity respectively. Every types of scientificity holds its own features. These features address, on the one part, the cognitive interrogation, and on the other part, the result of the cognitive interrogation.

3. What should be considered the Economics

Relationship / ***Aimed to clarify***	*Object-object (O-O)*	*Subject-object (S-O)*	*Subject-subject (S-S)*
Object	**Sciences** -physics -biology -cosmology -chemistry	**Arts** -music -painting -carving -literature -architecture	**Hermeneutics** -critics -politics -history
Subject	**Logics** -logics -accounting -mathematics -linguistics	**Praxeologies** -**economics** -sociology -psychology -theoretical philosophy	**Ethics** -religion -morals -social philosophy

***Fig.2**. The nature of Economics*

2015 GLOBAL CONJUNCTURE AND EXPECTATIONS

Napoleon POP[18]
Cornel ALBU[19]

„While the global recovery continues, it remains too weak and uneven--and falls short of our collective ambition for strong, sustainable and balanced growth. To confront this challenge, we need action now".

Christine Lagarde

Abstract

The year 2015 is bringing serious attention to the global economic model and some pertinent evolution which will lead to a repositioning of the economic powers, old and news. It is a sign that the old design of understanding the mighty locomotives of the further economic growth is changing and its perspectives should take care of the evolving in the new motivations which can add to the quality of future growth. We can thing about the change of the paradigm in the existing order and accept that economic thinking should adopt to the new realities.

Keywords: global economy, economic policies, international trade, finance and monetary impulses.

JEL Classification: F31, F39, F53, F59

Globalization was seen, usually by the good things that can bring a mega internationalization of economic activities, this time through the beautiful metaphor of sharing the same values in common. We were talking a lot about the opportunities and challenges of globalization and the need to "capitalize" them, but weakness in structural reforms on which globalization imposed have always been postponed and the awakening out of it was marked by a financial crisis unmatched. With this crisis, we began to discern the dark face of globalization and its challenges have become rather risk that the narrowed way how to capitalize on its opportunities.

2015 Global Conjuncture, followed step by step through quarterly statistics, reveal that attempts in economic recovery, maybe some successful (US, UK), took place amid worsening perception of risks in sizes not comparable: the possibility of an imminent new financial crisis, the dismantling of the EU, a phenomenon of unprecedented migration, local frozen conflicts, the decline in crude oil prices, the inefficiency of governance of the euro zone, tensions between NATO and Russia, unknown ways out of non-standard instruments of conducting monetary policy, etc. Of course, all these have focused somewhere on final decisional processes at different levels, but not meeting the expectations. The decisions have become more complex but without delivering comprehensive solutions. Referring strictly to economic growth, its characterization "has enjoyed" by a whole range of possible ratings: fragile, uncertain, inconsistent, fractured, lacking continuity, flexible firmness etc. with a huge impact on the functioning of commodity, goods and services markets, on capital financial and monetary too.

It is interesting that this complexity to have a reason and a good understanding in order to determine its perspective, it needs to be viewed through the major axis of the global model becoming easier to analyze. 2015 brought yet return of the US in the position of the engine of global economic growth, the adjusting the economic growth of China to its real potential (equivalent to decelerating its traditional high rates) by changing the driving factors (from investment and exports to domestic consumption), the worsening in the rates of development in BRICS countries, loss of pace in most emerging countries, especially in Latin America, the affecting countries with economies based on income from exports of raw materials and the slowdown in international trade.

Discrepancies in details come to confirm, by geographical areas or by countries, the intensity of uncertainties and volatility that manifests itself in economic field, powered by a a lack of ability to keep the mix of policies in harmony with the speed with which changes in market perceptions

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(mainly of commodities and financial) by investors in general, and consumers particularly. In this fragile context, there is a dominant noted given by the IMF analysis, that, while emerging small peripheral tangible progresses, including in relative increases in standards of living (showing a better reactivity to external stress through better disciplinary measures in economic policies in developed countries), excessive budget deficits and external debt reached dangerous levels, which and marked, in their turn, the lack of consistency in dealing with endogenous factors.

Packages of economic measures meant to easy the intensity of crisis have had usually a more disruptive impact (see medium-term effects of the austerity programs in many countries of the European Union) or adverse effects on the expectations, endangering the economic recovery to a sustainable level trough the investments. The intensity of fiscal consolidation (via the implementation of new of taxes, frozen wages, reduced public expenditures) required in order to reduce the budget deficits or generate the resources for external debt payments, annihilated the aggregate demand with the expected impact on the functioning of the private sector (which decreased production and increased the level of unemployment). The worst thing of fiscal consolidation was the significantly reduced fiscal space that governments could have been used in order to give the necessary impetus to public investment, capable to cope with the reluctance of the private sector to accommodate itself to the narrowing of the domestic and foreign consumer markets.

It should be noted, in these circumstances, that in 2015, the development phenomenon, in general, and the only support for economic growth, in particular, were due to the polices conducted by central banks, mainly in providing to liquidity at very low cost, with the reference rate in the money market close zero and even negative. They succeeded to ensure, on the one hand, financing budget deficits through financial market and by buying private equity against governmental instruments, and, on the other hand, the restoring the dynamics in the recovery of lending, in a still low trust worth environment between creditors and potential borrowers.

How it was observed the changes in phenomenology in economic field, of what we refer as global juncture defined statistically, mainly, by market indicators (quotations for commodities, stock indices for the capital markets, exchange rate volatility on Forex) and what was the psychological perception about the business environment, they have produced many fears about the global economic outlook assessments made by notorious economists (Stiglitz, Roubini) and many other analysts. The features of such developments were difficult to explain using the known traditional paradigm of the Great Moderation, but there seemed enough, in their view, to announce new crises, perhaps even a new greater financial crisis. The complexity of the new assessments did not fail to take into consideration the ongoing geopolitical facts (Ukraine crisis, the Greek crisis, the crisis of refugees etc.) and even the necessity to reassess the fundamentals of the current capitalism (Piketty, IMF). We reached to live in an economic system generating larger global imbalances when it comes to relative poverty and wealth dispersion.

In this context, we can sublimate the global economy in 2015, in terms of its main factors of drivers, on four fundamental aspects: what is happening with US and China's economies, what about the monetary policy conducted by FED and the evolution of the oil price. All other events, in the rest of the other economies, are only practical inputs and impacts of these fundamental aspects, becoming essential for the "health" of the global economy – sustainability and durability - and the sense of its evolution. They are interrelated and raises questions such as **whether they can** (a)reinforce the US economy becoming the global economic locomotive, (b)initiate the expected cyclical and structural adjustments to some obsolete economic models (China, Russia, EU), (c)produce speculative capital outflows burdening debts and exchange rate volatility (FED exit from quantitative easing operations and starting a general increase in reference interest rates), (d)witness a new decline of investments in the energy sector because of the crude oil oversupply), (e)put at risk for the countries exporting raw materials especially to China, (f)force Russia to react in terms of its dependence on incomes from oil exports at low prices, perhaps in the long run.

The current challenges of the world economy are brand new as compared to the two oil shocks of the 70s and 80s, global agenda becoming more complex and urgent. Regardless of the state of the global economy, the old paradigm is still close-minded, with a global agenda including the need for solutions inside a much wider interdependencies, represented by demographic pressure, climate change, environmental degradation and excessive movements of large populations. Under this

agenda we find also key areas of economic and social points to be addressed as global energy supply, new jobs creation (UE), fight against terrorism, trafficking in fissile materials and access to weapons of mass destruction (Iran, North Korea), failed states, endemic poverty etc. The urgency of the global agenda comes out from one of the most perverse effects of globalization that of "contamination evil", with great speed, as last financial crisis swept the globe in less then 24 hours. It is to be understood that without paving the way for genuine solutions to the global themes, we hardly can speak of a new stage of qualitative economic growth on the long term, where the business the cycles will manifest in less excessive limits without profound crises or unexpected bubbles in different areas of concerns.

World economic governance has succeeded in other periods of time to adopt the necessary measures - in reference to the two oil shocks, for examples - and passed easily through risks and uncertainties as in the time of the Great Moderates. The current problems is that the decision makers have changed a lot under the expansion of a lower political culture, they do not denote strong leadership both on domestic and foreign issues The exacerbation of many internal social and political problems prevented genuine global cooperation between them as required by the multitude of interdependencies we live with.

The monetary policy of the US and the needed (and always postponed) structural reforms towards new economic models, as China has to cope with but, at the same time, is shifting towards the integrated financial market, are affecting all the transmission channels as trade, capital, exchange rate, interest rate, confusing the momentum of any recovery in markets and economies. A big challenge is the departure of central banks monetary policy from unorthodox measures (FED, Bank of England, Bank of Japan, ECB) at a time when the governments of those countries and the euro area are not ready to solve their domestic and external debt burden. The idea of proactive economic policy prevails only as intent, while economic setbacks caused by the financial crisis cannot comply with fiscal consolidation measures or deflation, as consumers lack trust or have other expectations.

Stimulating demand in globalization can not ignore the wider role of the financial stability, plus the introducing new concepts like that of macro-prudentiality and macro-stability, which still seeks pragmatic resonances. Amid distrust, fuelled by many deviations from ethics and morality at business-level, corporations, financial institutions and governance, the structural reforms are confronted with social upheavals in a tense environment, amid restrictive economic policies taken in 2010-2012, whose effects have not yet been absorbed, and lately new dangerous challenges, as in Europe. Divergent positions between economic policies and actors to rule them explain largely the continuous amendments on global economic growth forecasts, by countries and geographical areas, in which UN, OECD, EU and IMF data testify. Short-term forecasts indicate variability unable anchoring credible policies and behaviours worth for business decisions. They are postponed or extended for new waiting periods, as there is no sign for a consolidated recovery required to open long term trends.

Referring to the expertise of the IMF, advanced solution in the present juncture conditions, overall 2015 was an **"upgrade" year in defining and implementation of sustainable economic policies** (here is another term that needs more study that would justify the its real content for us) that highlights different categories of countries. In advanced countries, except the US and Britain, it is still needed accommodative monetary policy, which emphasizes maintaining the role of central banks in providing liquidity support for commercial banks. In the euro area, the solving of bad loans, their stock rising to 900 billion euros (over 11% of global GDP) remains fundamental. Emerging countries need a better monitoring of the private sector exposure and more policies to increase the resilience of their banking systems (attention also to financial stability) against defaults o their debtors.

Globally, an agenda of updating the regulations and making quicker steps to ensure transparency and supervision of financial entities, mainly the shadow banking and hedge funds is needed. It is known that, in the post financial crisis, all the efforts of regulation and supervision were channelled again to commercial banks, field already over-regulated (see Basel III, creating Banking Union in the EU), but globally resolution mechanism including all the systemic financial institutions remains inadequate in the face of possible risks. The biggest risk which still remains is absolute possibility to

split a banking crisis of external country's debt, the final closure guarantees of the depositors calling on budgetary resources, yet precarious due to fragile economic development.

On the fiscal policy side, it is recommended more flexibility and their return to a "friendly" nature for economic growth, and, where there is fiscal space, tax incentives should be introduced. Globally, it is required a new culture for advancement in the improvement of domestic economic structures and policies leading to reform the labour, educational, health and industrial services markets, strengthening economic jurisprudence for the benefit of business and trade.

On foreign debts, two aspects are reported that can create conditions for a new crisis. The first is the tendency of excessive funding (again) the real estate activities and private construction, with the bubbling effects on the market. In many countries it is noted that the debts are not reduced, but simply they move between the public and private sectors or from country to country. The second is the deflation phenomenon (characteristic of Japan in the last two decades) which is still an overall danger, looking to the commodities markets. The euro area just missed it, although it marked the difficulties to return major European economies from a slow and uncertain evolution to a firm growth. Towards the end of 2015, although the euro almost reached parity with the US dollar, it was not a significant factor in stimulating of exports outside the EU, as a lower level of labour productivity and a low external demand persisted.

IMF launched **AIM programme** (Agile, Integrated and Member Focused) for assistance and recommendations to its member states coping with problems of current account deficits. The acronym refers to **agility** with which states apprehend and prevent in due time the potential risks and effect of contamination, to their capability to better **integrate** the linkages between their macro-financial projections and risk assessment, to a better **member focused** IMF assistance with taking into consideration their specific and general difficulties and providing them with available recipes. Best practices in coping with financial and fiscal policies for all countries call for avoiding fragmentation of markets on account of differences in approaching same problems. Concrete example of Great Britain, becoming the "Brexit case" for a possible exit from EU, reveals the great difference in approaching the role of financial markets by City in London and the new continental European alignment rules required by Brussels to the detriment of British financial tradition and its performance.

In conclusion, considering that there is a positive dynamic recovery, its pace remains below expectations, with weak effects of consolidation it in the medium term, many factors acting randomly against finding the proper ways of getting out of the many traps of the globalization. The combination of low economic growth and restrictions arising from the sovereign debt crisis, in general, and the state of the US and Japan economieis, in particular, impede sustainability efforts spend on solving the financial imbalances, domesticly and internationaly. Public debt and, in many cases, private sectors debts remain high and the decision between fiscal consolidation and economic stimulus remains a difficult choice.

The ongoing discussions focused on the international financial system architecture evolves nervously, but without an outcome configuring its future, a design which is very important for all of us. This uncertainty, which marks the very sense to understand, probably, a new International Economic Order (the old one being settled by the Bretton Woods agreements in 1944 and put into a kind of disolution with the end US dollar convertibility to glod in 1971) makes very difficult the path to go from continous measures to sanitize the financial system, in ordere to prevent new crises, to a stable global financial system. Such a situation will continue to influence the develoment of the global economy for many years from now on. It is the future which will need to put in a new balance the market forces and the governance capability to moderate the savage evolution of the market, the truth being that the lately are produced just becouse the governance is implementing wrong policies in wrong times.

The Evolution of the Growth Rate
of the World Economy and International Trade in the 2014-2016 Years
- annual changes, in real terms, in% -

	2014	2015 estimates	2016 forecasts
Global GDP, of which:	**3,4**	**3,1**	**3,6**
1. Developed countries, of which:	**1,8**	**2,0**	**2,2**
- USA	2,4	2,6	2,8
- Japan	-0,1	0,6	1,0
- Canada	2,4	1,0	1,7
- Euro zone - 19 countries, of which:	0,9	1,5	1,6
- Germany	1,6	1,5	1,6
- France	0,2	1,2	1,5
- Italy	-0,4	0,8	1,3
- Spain	1,4	3,1	2,5
- European Union – 28 countries, of which:	1,5	1,9	1,9
- Great Britain	3,0	2,5	2,2
2. Emerging and developing countries, of which:	**4,6**	**4,0**	**4,5**
- Asia, of which:	6,8	6,5	6,4
- China	7,3	6,8	6,3
- India	7,3	7,3	7,5
-Latin America, of which:	1,3	-0,3	0,8
- Brazil	0,1	-3,0	-1,0
- Mexic	2,1	2,3	2,8
-Middle East, North Africa and Pakistan	2,7	2,5	3,9
-Sub-Saharan Africa, of which:	5,0	3,8	4,3
-Republic of South Africa	1,5	1,4	1,3
-Nigeria	6,3	4,0	4,3
-Community of Independent States of which:	1,0	-2,7	0,5
-Russia	0,6	-3,8	-0,6
The volume of international trade (goods and services), of which:	**3,3**	**3,2**	**4,1**
--IMPORTS, of which:			
-Developed countries	3,4	4,0	4,2
-Emerging and developing countries	3,6	1,3	4,4
-EXPORTS, of which:			
-Developed countries	3,4	3,1	3,4
-Emerging and developing countries	2,9	3,9	4,8
Crude oil (prices expressed in US dollars)*	**-7,5**	**-46,4**	**-2,4**
Commodities - excluding fuels (simple average weighted place in world exports)	**-4,0**	**-16,9**	**-5,1**

**) Brent crude, simple average price (England), Dubai, W.T.I. (US). The average international price (USD / bbl) was in 2011 to 104.01 in 2012 to 105.01 in 2014 of 96.25. 2015 is estimated at 51.14, and 2016 is forecasted at 50.36*

Source: IMF - "World Economic Outlook", October 2015, Washington

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FISCALITY, PUBLIC BUDGET, AND REAL ECONOMY

BUDGET ELABORATION IN AUSTRIA

Alin Stelian DOBRE[20]

Abstract

The classic annual budget should pass the floor to a multi-annual budget to accommodate the financial perspective of the EU budget because annual budget is currently used unresponsive for multiannual financing of European projects. Multiannual budget should be designed both the commitment and payment appropriations to be able to have a cash flow that does not lead to cash shortages. A modern budget consistent with the requirements of deepening European integration should meet the following conditions: a) applying generalized budgetary classification ESA (European Standard of Accounts) or GFS; b) an orderly progression of budgetary expenditure, the monthly budget deficit; c) balance the budget should be made cyclically in the recession have made higher expenses and budget deficits within 3% of GDP, while in periods of economic boom, the budget should have surplus or in balance ; d) a multiannual budget programs should be implemented based on ceilings and margins in commitment appropriations and budget appropriations; e) use of objective methods for ranking projects budget; f) Macroeconomic indicators on which it is built are often inflated budget on the revenue side in order to cover some sensitive expenditure; g) institution that assess these macroeconomic indicators should be independent of government, preferably from specialists or experts from Academy or foreigners as in Austria.

Keywords: multi-annual budget, budget reform, commitment and payment appropriations

JEL classification: A11, B22, F02

Main introductory items regarding budget elaboration in Austria

Budget elaboration in Austria is a process that has evolved from a traditional, complicated and oriented toward expenditure, on a modern one, simplified, performance-oriented. At all stages calendar Austrian budget there is an interinstitutional intense dialog, no institution can decide budgetary configuration by itself.

The Institute for forecasts shall draw up macroeconomic indicators has a significant role in the establishment of the the medium term framework expenditure. In Austria, the Institute for the forecasts is independent from the Ministry of Finance, în romanian case it is subordinated.

The final decision should be taken jointly by a majority vote of those involved, the time when one person decides a certain structure are long gone in Austria, some important aspects in our continuing this practice obsolete. In Austria, Parliament has a more important role in the implementation of the budget, in any budget revision, in macroeconomic indicators change and political parties should have prominent specialists in finance and the role because Parliament has the power of co-decision in budgetary measures.

The elaboration of budget in Austria oscillates between financial discipline, a constant of the EU budget and flexibility, a prerequisite for economic development and budgetary modern vision. Austrian budgetary reform aims to create a mechanism for management and use of budget revenues more efficiently and more efficacy. The new medium-term expenditure framework has been implemented in the context of budget reform requires mandatory ceilings on spending four years prior to the five positions corresponding to the main functions of government. This framework supports sustainable development in Austria budget.

The Austrian has two different types of expenditure ceilings. Nominal fixed ceiling, expressed in euro applies to most (80%) of expenditure. The other cap is variable depending on some parameter ranges defined. This ceiling applies to expenses related to the business cycle and therefore ensures that automatic stabilizers can work properly and exercise a countercyclical influence on the economy. It uses variable ceilings for expenditure relating to reimbursements from the EU, direct

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expenses related to revenue (ie actions financed from value added tax, expenses for hospital financing) or charges for guarantees.

The budget reform in Austria

Austrian budget reform started in 2009 has achieved the following objectives:

1) Introduce medium-term expenditure framework, over four years, with expenditure ceilings for large groups of chapters (headings / budget lines);

2) Separation general discussion on fiscal policy and establishing spending ceilings for the medium-term expenditure framework (together with the report budgetary strategy) discussions on the annual appropriations of the budget;

3) Strengthening the role of responsible ministers, what did each Minister to be his own finance minister by eliminating many of the detailed budget appropriations and staffing plans in the annual budget law;

4) Setting up facility economy, allowing unused credits to be carried over at the end of the budget year;

5) Using performance management and results-based activities in the elaboration of budget; 6) accounting system was reformed and updated to introduce accrual accounting, while preserving and budget on a cash basis.

Significant reforms taken from 2009 to the present are presented below. It introduced a medium-term expenditure framework (budget year + 3 years) enacted into law, which sets binding spending ceilings at an aggregated level. Apart from this law will be presented to the budgetary strategy report that will explain economic considerations and political objectives of the medium term expenditure framework, fiscal detailed information, such as revenue forecasting and analysis on fiscal and budgetary policy. These two documents will be presented in spring (at the beginning of the second quarter), separate from the annual budget law.

In Austria, each minister is his own finance minister, the responsible minister on budget appropriations but also flexibility in the management commitment and payment appropriations that fall within his jurisdiction.

A greater emphasis was placed on the use of performance information and results to guide budget decisions.
Specific features in current Austrian budgetary process are:

The process of drafting the budget reflects most of the reforms introduced in recent years:

- fiscal legislation covering all levels of government, central and local;
- firm agreements for a coalition government for four years;
- biannual budget planning;
- independent economic assumptions;
- overall spending ceilings;
- labor control.

Tax regulations covering all levels of government administration

To coordinate central and local budgets - it was introduced in 1999 "Stability Pact in Austria". Since 2001, this stability pact has set targets for deficit and surplus for a period of four years. Targets are defined in national accounts under the same conditions as applied under the Maastricht criteria Economic and Monetary Union (EMU). About a third of all government spending in Austria is carried out by local government. Local governments have their own budgets and can borrow without needing approval from the central government. However, local governments have very limited incomes. Most of their revenues come in the form of fiscal transfers from the central government. In fact, the central government collects over 95% of all taxes in Austria. It is responsible for legislation on tax and financing through grants to local governments. Austrian Stability Pact is ratified by Parliament, has the force of law and stipulates that the consolidated

budget be balanced while the central budget may have a deficit equivalent to 0.75% of GDP budget surplus should have a local equivalent to 0 75% of GDP. Pact includes sanctions if the government levels do not meet their balanced budget target. These penalties include fines to be individual or unit level administrative failed to fulfill its obligations.

Firm agreement for a coalition government for four years

No political party enjoys a majority in the Austrian Parliament. Therefore, it is necessary to form coalitions between two or more parties in order to form a government. When it is creating a new government, announcing major policy objectives in a document known as the "program of the coalition government." The program's governing coalition is a document containing general policy and reform initiatives to be taken during the government's term, they are discussed budgeting issues only in general terms, in particular by establishing a explicit deficit target for each year. Ministry of Finance provides a budget forecast for the period of 4 years of government income to be received and the ceiling on the level of expenditure.

Planning biannual budget

For six years, Austria has adopted a biannual budget planning horizon. However, the budget is adopted annually by Parliament as required by the Austrian constitution. The main reason for the adoption of the biannual budget was political.

It was seen as a better basis for tackling difficult reforms. In practical terms, the biannual budget provided greater safety to finance ministries, for multi-annual budgetary programs. In the absence of biannual budget planning was not implemented reform initiatives. Biannual budget should be seen as a interim substitute to medium-term expenditure framework.

The independently economic assumptions on which the budget are elaborated

All macroeconomic assumptions used in the budget process are prepared by an independent institution, the Austrian Institute for Economic Research (WIFO). Austrian Institute for Economic Research produces forecasts for the Treasury, the prospect of four years used in the coalition negotiations, macroeconomic assumptions for the annual budget. The objective of the Austrian Institute for Economic Research is to forecast as accurately as possible, as close to reality and not necessarily prudent. Austrian Institute for Economic Research was founded in 1925 and is an independent legal terms standalone funded by central government. The Institute has a professional staff of about 100 people. His work is supervised by a Scientific Committee composed of independent experts Austrians and foreigners, academics, etc.

Overall spending ceilings

Austrian finance ministry adopted spending ceilings for each overall chapter. Ministries are given maximum freedom to reallocate capped all expenses except staff. The ceiling for personnel expenditure is rigid. Entering nominal ceilings in euro and ceilings variables that depend on changes of macroeconomic parameters are essential elements of fiscal reform in Austria.

Control of labor

Austria uses a comprehensive system of labor control in the first row of the employees in the public and in the privat. These controls on labor are implemented every year together with the government budget based on legislation adopted by Parlament. The control is set at a very detailed level: significant at the level of a ministry and for each professional degree. Because the total number of positions within a ministry is decided and determined by Parliament, it can not be changed by the government. However, it is possible to adjust positions in a ministry by government decree, as long as there are no extra costs or unnecessary additional posts.

The process of budgeting

The budget calendar traditionally begins in May, seven months before the beginning of the next fiscal year with internal preparations in the Finance Ministry and other ministries. Ministry of Finance updated baseline projections for revenue and expenditure. It maintains a comprehensive internal framework of medium-term expenditure which is updated quarterly, including the economic assumptions. Ministry uses economic assumptions that are transmitted by the Austrian Institute for Economic Research. The Ministry of Finance uses internal models to estimate the impact of demographic trends and growth rates used in updating programs. Updated baseline scenario - with multiannual targets of the general government and reform initiatives contained in the Stability Pact will size the Austrian fiscal room for maneuver for the next budget year.

The finance minister will share the findings of this exercise before presenting the Prime Minister to be elaborate in government. Prime Minister and leader of the coalition will hold talks because the political priorities must be reflected in the budget. There are no specific spending ceilings set for each ministry in this stage. To ensure that the consolidated budget indicators are in line with medium-term budgetary program of the Government, Ministry of Finance then prepares the budget targets for every major budget chapter (one or more per ministry). Orientations developed by the Ministry of Finance contain expenditure ceilings and revenue estimates for each chapter and specific accounting policies and directives for each entity. The ceilings consist of two lump sums, one for personal expenses and one for all other expenses. In addition to restricting personal spending ministries have complete freedom reallocation between different credits from the ceiling, taking into account the political priorities of the government and mandatory spending. Final spending limits are due to negotiations between ministers and ministries of finance and in some cases with the participation of Prime Minister and leader talks of coalition . At the same time, ministries will collect proposals on expenditure ceilings in the units, subsidiaries, etc. This is an exercise from the bottom up in order to draft a proposal for the composition of aggregate budget for the ministry. It should be noted that an important element of the introduction of spending limits in the global top-down approach aa budget was to strengthen the role of the central budget units in each ministry.

The Ministry of Finance has only a policy of interaction with these units. Ministries must submit proposals for the allocation of the Ministry of Finance by the end of June to July. These proposals are generally significantly in excess of the expenditure ceiling set by the Ministry of Finance. In the coming weeks, ministries and their counterpart in the Ministry of Finance meet to exchange information and discuss loan applications. On average, applications ministries are about 10% higher than the initial limits proposed by the Ministry of Finance, but the differences vary considerably between ministries. The talks were held in ad hoc meetings rather than in a formal program of meetings for this purpose default and are open. After this exchange of information and views on the levels of budgetary appropriations, officials of ministries and the Ministry of Finance will then inform their ministers will meet to solve important problems. When ministers will meet with the Minister of Finance, the amounts will be discussed at chapter level, not at every credit in each budget. The most sensitive outstanding issues between ministers and the finance minister can reach the Prime Minister. These issues are ultimately decided by the prime minister and leader of the ruling coalition. Some problems are not always solved before the budget is introduced in Parliament. Following the conclusions of the final negotiations, the expenditure ceilings for each chapter are sent to ministries. They allocate funds on a structure and provides detailed accounts of the Ministry of Finance together with related comments to be included in the budget documentation. Ministry of Finance budget document introduces these final situations .This stage also includes control of the workforce adjustment, budget staff. The situation on the labor control with the budget proposal will be presented to Parliament in late octomber. As previously mentioned, a cornerstone of the planned reforms is to introduce medium-term expenditure framework, as expenditure ceilings binding for a period of four years. In fact, a new year, the fourth would be added each year. Expenditure Framework is a document more efficiently and detailed compared to the ruling coalition program which is the key political document of the government.

If the ceilings must be changed, the government should make this explicitly, to bring arguments and propose relevant amendments in the plenary of Parlament. Introducing medium-term expenditure framework is an important measure of fiscal consolidation. The law project for the medium term expenditure framework will be accompanied by budgetary strategy report, both being presented to

Parliament in the spring (second semester) of each year. Medium term expenditure framework will be approved by Parliament and set expenditure ceilings at an aggregated level. Accompanying budgetary strategy report will be voted in Parliament; It will be developed to capture the objectives of tax - budgetary policy. These documents will not discuss individual budget appropriations but rather give Parliament an opportunity to discuss budgetary aggregates in terms of economic and fiscal general. Individual loans will be considered when the discussion on the annual budget and must be within the medium-term expenditure framework. It is important to ensure a clear division between the medium-term expenditure framework (with the fiscal strategy report) annual budget. Discussing the level of appropriations for each chapter in spring (second quarter) risk level discussions extending individual credits. This would mean that Parliament should discuss essentially the same budget twice in the same year, which can lead to blockages in the normal course of things. Medium-term expenditure framework should contribute to maintaining fiscal discipline in preparing the budget each year, being approved by Parliament before the budget negotiations between the finance ministry and ministries. The ceilings will be set for each chapter of the budget.

These chapters are grouped into five categories or headings :

- general government affairs, courts and security;
- employment, social services, health and family;
- education, research, culture and art;
- economic affairs, infrastructure and environment;
- financial management and interest.

The ceilings will be mandatory at the section and chapter level for the following year (t + 1). As detailed planning is over several years and it is difficult to predict the ceilings for the years beyond year (t + 1) will be mandatory only at the heading, while limits at chapter are purely indicative and open to any change the ceiling box. Under each heading, there may unallocated funds to be carried forward in the coming years to cover contingencies. Access to these funds should be limited to extraordinary cases and unpredictable.

As a general rule, the ceilings are fixed. However, some expenses such as unemployment programs depend so much economic development cycle that capping is not considered feasible in advance.
Therefore, there is a limited number of variable thresholds. These limits are based on economic indicators and therefore automatically adjusted: for example, if the unemployment rate rises, the ceiling for expenditure on unemployment will rise accordingly and vice versa. The same is true for specific expenses that depend on income - for example, amounts transferred to local budgets depend on tax revenues at central level. About 20% of total expenditure falls into the category variable. The introduction of medium-term framework is in line with best practices in other countries of the OECD (Organisation for Economic Co-operation and Development). The introduction of a fixed overall ceiling - with no variable component - strengthen medium-term expenditure. Experience from countries such as the Netherlands and Sweden showed an overall ceiling of fixed costs is feasible and effective. A "margin expenditure" between projected expenditure and fixed ceiling would allow expenses to fluctuate without fiscal policy to become pro-cyclical. There concern that time and several types of expenses are reclassified as variables. The Austrian is to have a reserve level heading to fund exceptional development needs. However, there is a risk that the existence of reserves should be seen as a way to deal with unforeseen expenditure needs or new spending. Experience shows that the ministries to fund a new initiative does not appeal to domestic savings knowing that there is a reserve fund. Austrian authorities have studied this issue and also ensure that the reserve fund is used only after being exhausted source coming from domestic savings. In addition, the newly introduced budget reform has strengthened its role each ministry financed by reducing the number of lines, budgetary items and by giving ministers authority, authorizing expenditures how to distribute / redistribute funds between the various headings. Therefore, the ministries will need increased flexibility in unused carryover from year to year and controls on labor, technical staff.

Public finance indicators in Austria

Gross domestic product in Austria rose to 313 billion euro in 2013 from 307 billion in 2012. Average gross domestic product in Austria during 1976-2013 was 177 billion euro, up from 55 billion euro as it was in 1976 to a record high in 2014 of 322 billion euro according to Eurostat.

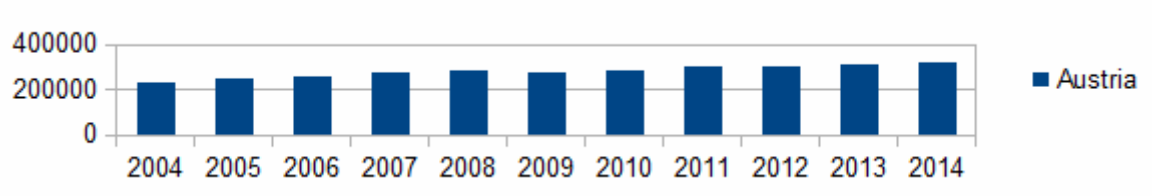

Fig.1. *GDP in Austria, mil. Euro in period 2004 - 2014*
Source: interactive database EUROSTAT, http://epp.eurostat.ec.europa.eu

Austria recorded a consolidated budget deficit in 2014 equal to 1.5 percent of GDP. Average general government deficits in 1995-2014, period was -2.35 percent of GDP, reaching a minimum of 0 per cent of GDP in 2001 and a record low of -5.80 percent of GDP in 1995 according to data reported by Eurostat.

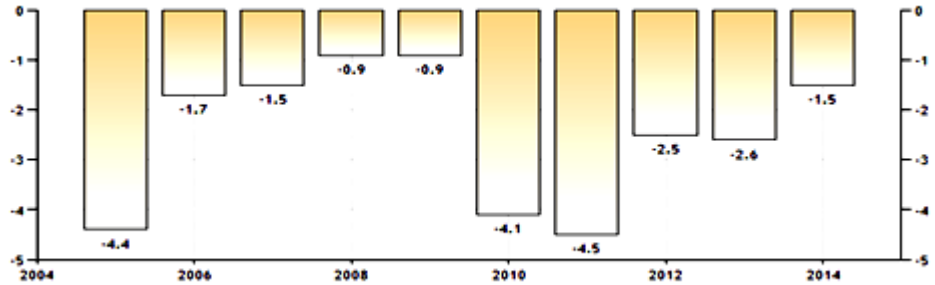

Fig.2. *Budget Deficit in Austria 2004 – 2014 (%PIB)*
Source: interactive database EUROSTAT, http://epp.eurostat.ec.europa.eu

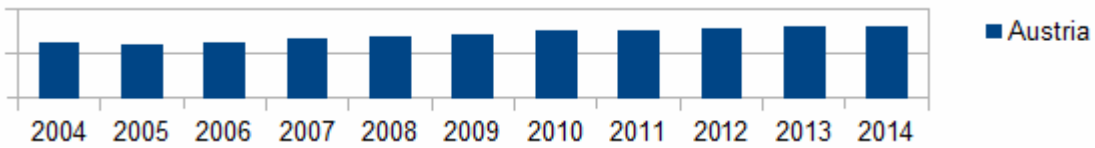

Fig.3. *Budget expenditures in Austria 2004 – 2014, mln. Euro*

Source: interactive database EUROSTAT, http://epp.eurostat.ec.europa.eu

Consolidated budget expenditures in Austria had an increasing trend over the last decade 2004 - 2014. Average government spending in Austria was 141 billion euros in the period 2004-2014, from 126 billion in 2004 to register as a record level in 2014, 161 billion.

But as a percentage of GDP, public spending in Austria fell from 53.8% in 2004 to register as 50.1% level of 2014. Average public spending as a percentage of GDP in Austria in the last decade was 51% of GDP.

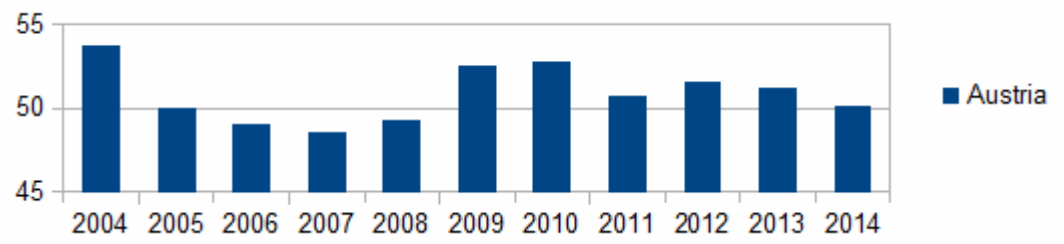

Fig.4. *Budget expenditures in Austria 2004 – 2014 (%PIB)*
Source: interactive database EUROSTAT, http://epp.eurostat.ec.europa.eu

Conclusions

Austria is a strong state, budget represents 50% of Austria's GDP. 8 million Austrians produce a GDP of 320 billion euros, 2 times more than 22 million romanians. The implication in the economy is complex. For Austria were corrected market failures that could result in the collapse of the economic system. So they re-nationalized banks, distribution of drinking water production and distribution of electricity were renationalised. Their experience has shown that the transition from state monopoly to a private has adverse social consequences and the energy, water and an important part of the banking system must belong to the state.

Tax reform and budgetary must be supported by policy challenges in key areas of structural reform, with emphasis on legal reform, competition policy, privatization policy and regulatory policy service delivery infrastructure and technology, and on reforming Education and social protection (health, pensions).

Romania must follow the steps taken by Austria in budgetary reform and to move to a multi-annual budget to accommodate the financial perspective of the Community budget because the annual budget is currently used unresponsive to multiannual financing of European projects. Multiannual budget should be designed both the commitment and payment appropriations to be able to have a cash flow that does not lead to cash shortages. A budget according to EU standards should meet the following conditions: a) monthly public execution of expenditure without large gaps under budgetary programming, b) balancing the budget according to the business cycle, in the depression should be encouraged spending on investment, and in periods of economic boom have created budgetary reserve, c) multi annual nature as far-reaching programs financed from European funds are spread over several years, and their value should not be included in its entirety in year budget as is now required by law but stages, d) an institution with specialists from Academy or foreign experts independent of the government should provide macroeconomic indicators underlying budgeting.

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INFLATION DYNAMICS AND THE IMPACT ON GROWTH IN POST-DECEMBER ROMANIA

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Abstract

The Romanian economy after 1990 face a series of structural imbalances with serious consequences as the tense of the economy, the uncertainty of the economic environment, the shocks induced by different contradictory or ambiguous economic policy.

Macroeconomic problems have some positive, some negative side. Regarding inflation, the negative side of the monetary economy, it will interfere with all the negative aspects of contemporary economy: recession crisis, unemployment, budget deficits, external deficits (trade and payment).

This paper highlights the evolution of inflation and the impact which this had on the Romanian economic growth during 1990-2014.

Keywords: measuring inflation, economic growth, inflation rate, GDP

JEL clasification: C 11, E 52

After 1989, in the early 90s, in Romania, the state was the only supplier of goods and services as a result of the socialist property became pervasive. Monopoly in all sectors of national economy and left its mark on the functioning of the entire economic system in our country.

The command economy imposed on this basis, centralized management unit, mainly through unique plan of the entire economic and social activities. In these conditions, the activity of economic agents and, in general, macroeconomics was operating according to the rules and regulations of the center, from top to bottom, according to economic and financial indicators enrolled in the single national plan. It can be said that the managerial autonomy of the undertakings was quasi-inexistence. Market was considered an insignificant economic system, mainly with the role of exhibition space processes of sale in order to supply technical equipment to businesses and crossing for consumption by the population in economic goods needed.

Price, interest rate, credit, wages, taxes and fees, as economic instrument were directed and correlated centralized artificially by single plan being ignored completely level and evolution of their real relationship between supply and demand, cost and price, wages and productivity, expenses and effects, both on the domestic as well as international level. Therefore, in such conditions, competition ceased to be a regulator of the market, reflecting the efficiency and profitability, in fact directives in the single national plan directives that had nothing to do with national and international realities.

Economic resources were distributed centrally by the national plan, almost entirely, in doing so and in terms of the processes of modernization and refurbishment of production capacities. Both employees' income, and income were determined centrally cooperative farmers, are deliberately ignoring their natural connection with the real effectiveness of the work of each worker, thus the motivation by repealing labor or any interest in further training and increasing labor productivity.

Romania's foreign trade was organized and held on the same single plan that required balancing or activation of trade balance by increasing the exports and depletion of imports, courses return at least absurd and serious consequences on meeting the demand on domestic and the development of national economy in the short, medium and long term.

With certain exceptions, insignificant fact, economic indicators in the 1990-1998 period of the system record level and total dynamic inappropriate.

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The real economy has been in a permanent setback, with some revival in 1994 and 1999. With the exception of isolated sector advances or temporary and inflation, which, after peaks in 1993 and 1997 diminished without exceeding 60% in most industries the situation has deteriorated. Decline and construction industries, agricultural production location on a downward trend almost continuously, accompanied of rising unemployment, or reflected in the gross domestic product. In such conditions the state domestic debt increased adverse developments in foreign trade, evidenced in increasing foreign trade deficit, exacerbating the decline.

It is worth noting that in 1998 the first sector of the economy, in terms of participation in the gross domestic product, has become the service. This is a normal trend reflecting structural changes in the economy. It should also be emphasized that raising the share of services in GDP, from 33.2% in 1997 to 37.8% in 1998, has been given that the gross value added was 6.3% lower than the previous year in real terms.

Dynamics of gross domestic product in Romania, the synthetic indicator of economic growth in the period 1990-1998 highlights a largely economic policies in the last decade of the twentieth century. Thus, in 1990-1991, and 1992, gross domestic product has declined particularly strongly. The sharp decline in domestic resources for consumption and development was due to the low efficiency of use of elements of economic potential and, primarily, of labor resources (in 1990 held shortening the workweek by about 13%, early retirement a large number of employees, while increasing revenues absolutely irrational people employed). In the same period there was a strong domestic market penetration by imported products, mainly for consumption, having been a runaway budget deficit and trade balance of payments. The destructive effect of this has been amplified by the growth and expansion of arrears as deep capitalization of undertakings.

Between 1993-1996 there was a relative recovery in the economic environment, especially as a result of the privatization process, which has brought some revival in the evolution of GDP, this reaching to about 88% of GDP in 1989 as a result of the increase by approximately 17.3% compared to 1992.

After 1996 the GDP recorded a freefall in real terms due to the economic policy promoted by the new policy options occurred after the 1996 elections, registering deficits rising (up from 18% in 1999), gross value added in industry representing in real terms, only 89.5% of the accomplishments of the previous year. In 1999 the industrial production decreased in absolute volume, 8% and 8.8% in comparable in terms of number of days. These results were followed in most industrial sub decrease of activity, the delayed restructuring and low economic efficiency.

As regards inflation, it rose continuously from about 3% of the civilian working population in 1991 (unemployment rates were registered in Romania since February 1991) to 10.9% in 1994, followed in 1995 and 1996 to grow and reach the level of 6.6%. Since 1997 the unemployment rate begins to grow again continuously, reaching the highest level in December 1999 (11.5% in relation to total working population).

According to a report by the National Institute of Statistics, in the first 4 years after the Revolution of December 1989, the inflation rate recorded levels ranging between 200% and 300%. Inflation peak was reached in December 1993 when its level was 300%.

In the second period, 1994-1996, the inflation rate dropped to 27%, a level that has remained constant until 1 June 1995, after which grew to over 56% at the end of 1996.

The third period, between the years 1997-2000, debuted a new inflationary spurt, which was maintained with small annual variations by the end of 2000 at a rate of over 150 percent. There followed a gradual decline in inflation to 14% in 2003 and 2005 inflation was reduced to single digits. Since then and until now a significant decline in inflation, including in 2009, the year of the deepest international economic crisis, which affected the most and our country.

The table below shows the inflation in Romania during 1991-2014.

Table 1

Evolution monthly rate of inflation between 1991 and 2014

years	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
monthly inflation	10.3	9.6	12.1	4.1	2.1	3.8	8.0	2.9	3.7	2.9

years	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
monthly inflation	2.2	1.4	1.1	0.7	0.7	0.4	0.5	0.5	0.4	0.6

years	2011	2012	2013	2014
monthly inflation	0.3	0.4	0.1	0.1

Source: National Institute of Statistics

After 25 years of the 1989 revolution, Romania appears in growth statistics as if they had traveled only once a five-year plan. This time, however, not a centralized economy and dubious reports, but under conditions of market economy, a full member of the EU and integrated into what was called before "consumer society".

A key factor in the transition to a market economy was the liberalization of prices. The zero time for action was November 1, 1990, and the price level in October 1990 was chosen as reference for subsequent change in prices. Change which allow relocation between them and eroded the purchasing power of incomes. There followed a period of very high inflation, while the coverage of commodity money in circulation was extremely poor, between 1991 - 1993 is characterized almost permanent monthly values of double-digit price increases. The slowdown in the inflation process failed in 1996 and in early 1997 Romania was confronted again with values close to those at the start of the decade, the boom on the exchange rate. In 2000, average monthly inflation fell below three percent, then about two years consecutive halved once the trajectory 1.4% in 2002, 0.7% in 2004 and 0.4% in 2006, before returning anything above the background of robust economic growth.

With the manifestation of the economic crisis, the price increase was braked to values compatible with European standards in the field amid the incomes policy adjustments and lack of internal demand. The note is only now that Romania is back, under Office of the supply-demand ratio, the stability achieved by administrative means before 1989.

Contrary to appearances and widespread opinion, the prices were not sustained any socialist period, as can be seen from the statistics provided by the National Institute of Statistics consumer price index between 1971-1990. The value somewhat higher in 1990 due to the liberalization occurred in the last two months.

Moreover, although product prices were set at the factory and the label being the same all the commercial network, they have occurred small changes in various cases and the resulting change of modest to the general price index below the theoretical limit of 2% currently recommended. Unlike other products, fuel to be updated relatively often and tripled after the oil crisis of 1973 to 1974.

The major exception was 1982, when prices were modified in a number of commodities. The explanation is the loan agreement concluded in June 1981 with the IMF, under which Romania could borrow capital markets and external debt climbed to the equivalent of about one-third of GDP at the time, the money paid and great sacrifices forced to 1989.

Consumer prices fell by almost 3% in June compared to May, due to lower VAT on food and beverages at 9% from 1 June and the annual inflation rate reached a negative level of -1.6% for the first time in 25 years, influenced by cheaper food by 6.4%.

In May , consumer prices rose 0.5 % from April, and the annual inflation rate increased from 0.8 % to 1.2 % , amid rising food by 1.2% and non-food 0.8 % and from the increase of tariffs for services by 2.1 % .

Table 2

Consumer price indices and inflation in Romania during 1971-2014

Year	Consumer price indices %	Inflation rate %	Year	Consumer price indices %	Inflation rate %	Year	Consumer price indices %	Inflation rate %
1971	100,6	0,6	**1986**	101,0	1,0	**2001**	134,5	34,5
1972	100,0	0,0	**1987**	100,9	0,9	**2002**	122,5	22,5
1973	100,7	0,7	**1988**	102,2	2,2	**2003**	115,3	15,3
1974	101,1	1,1	**1989**	101,1	1,1	**2004**	111,9	11,9
1975	100,2	0,2	**1990**	105,1	5,1	**2005**	109,0	9,0
1976	100,6	0,6	**1991**	270,2	170,2	**2006**	106,56	6,56
1977	100,6	0,6	**1992**	310,4	210,4	**2007**	104,84	4,84
1978	101,6	1,6	**1993**	356,1	256,1	**2008**	107,85	7,85
1979	102,0	2,0	**1994**	236,7	136,7	**2009**	105,59	5,59
1980	102,1	2,1	**1995**	132,3	32,3	**2010**	106,09	6,09
1981	103,1	3,1	**1996**	138,8	38,8	**2011**	105,79	5,79
1982	117,8	17,8	**1997**	254,8	154,8	**2012**	103,33	3,33
1983	104,1	4,1	**1998**	159,1	59,1	**2013**	103,98	3,98
1984	101,1	1,1	**1999**	145,8	45,8	**2014**	101,07	1,07
1985	100,8	0,8	**2000**	145,7	45,7			

Source: National Institute of Statistics

Before the change of regime, Romania peaked quantified development through GDP in 1988, when slightly exceeded the threshold of $ 60 billion. Then there was the renunciation of Most Favoured Nation that still had the relationship with the US, which came after the announcement in the spring of 1989 on payment of the foreign debt.

Forcing outward payments and lack of investment in technologies exhausted, however, the economy. He followed the decline, because in 1990 also get only two thirds of the maximum value of GDP socialist. Current values in lei were already no longer relevant because of hyperinflation. Besides the inherent shortcomings, it allowed rapid adjustment of the relationship between the relative prices of goods and services.

Decreased production dismantle trade system of the socialist countries and the loss of markets, liberalization of prices and the exchange rate have brought Romania over only another two years to the catastrophic situation to descend to less than a third of the result expressed in dollars of 1988. There followed a tortuous comeback marked the end of the decade the global crisis and negative economic growth.

Table 3

Evolution of GDP in the period 1990-2014

year	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
GDP (trillions lei)	2.2	6.0	20.0	49.7	72.1	109.0	252.0	338.0	545.0
GDP (billion USD)	28.9	19.6	26.3	30.0	35.4	35.3	35.2	38.1	35.6

Source: National Institute of Statistics

Basis on which attempted to advance production during 1992 - 1996 proved to be shaky and between 1997 - 1999 appeared with major macroeconomic problems , the Romanian state is on the brink of ceasing payments . The resumption of economic growth has occurred just beginning 2000 , the advance being continuously until 2008 , the year the GDP reached the highest historical value in real terms.

Table 4

Evolution GDP in Romania during 2000-2014

year	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
GDP (trillions lei)	80.4	116.8	152.0	197.4	247.4	289.0	344.6	404.7	514.7	501.1
GDP (billion euro)	44.8	48.4	50.3	58.9	61.1	79.8	97.8	121.3	139.8	118.3
year	**2010**	**2011**	**2012**	**2013**	**2014***					
GDP (trillions lei)	522.6	557.3	596.7	639.3	674.3					
GDP (billion euro)	124.1	131.5	133.9	144.7	151.9					

** Forecasted values*

Source: National Institute of Statistics

The downturn of the early 90s appear more subdued seen in real terms. Kickback maximum recorded in 1992 was 25 %. We lost, so a decade of development, as Romania has returned to performance in 1991 only in 2000. After shifting the emphasis on the private sector and reforming the tax system firms really started economic growth.

Table 5

Economic growth in Romania during 1990-2013

years	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
economical growth	-5.6	-12.9	-8.8	1.5	3.9	7.1	3.2	-4.9	-2.1	-0.4
% compared to 1989	94.4	82.2	75.0	76.1	79.1	84.7	87.4	83.1	81.3	81.1
years	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
economical growth	2.4	5.7	5.1	5.2	8.5	4.2	7.9	6.9	8.5	-7.1
% compared to 1989	83.0	87.7	92.2	97.0	105.2	109.7	118.3	126.5	137.2	127.5
years	**2010**	**2011**	**2012**	**2013**	**2014**					
economical growth	-0.8	1.1	0.6	3.5	2.6*					
% compared to 1989	126.5	127.9	128.6	133.1	136.6					

** Forecasted values*

Source: National Institute of Statistics

After 25 years since the change of regime in 1989, Romania is about to resume economic growth reached in 2008 where , with almost full recovery of the decline in the years 2009 - 2010. Now, however , all the macroeconomic indicators presented in compliance with requirements imposed by the Maastricht Treaty , with inflation stabilized and a very stable exchange rate .

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CURRENCY, FINANCIAL INSTITUTIONS AND NOMINAL ECONOMY

AUTOMATIC MONETARY STABILIZERS – A SOLUTION FOR A BETTER MONETARY POLICY AND ECONOMY FUNCTIONING

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Abstract

As we know, the opposite of the current that support a strong discretionary action of the state is the current that completely excludes the intervention of the state in the economy. In addition to these, there is the current which claims the use of more "light" tools in the management of macroeconomic policies and the economy in general. In order to compensate for the fluctuations in business cycles and even the emergence of some unexpected shocks or imbalances in the economy, in the macroeconomic policies framework, among other things, automatic stabilizers have been proposed to be used. The role and their's operation it was widely discussed especially regarding the fiscal and social sphere as: progressive taxes, transfers, social benefits etc. Thus, this article aims to identify and explain the operation of monetary (and foreign exchange) automatic stabilizers, while trying to provide also for the Romanian monetary policy some benchmarks in order to act in this regard.

Keywords: automatic monetary stabilizers, business cycle, monetary policy, output fluctuation

JEL classification: E32, E52, F31

Introduction

The crisis has left behind numerous wounds, especially within Europe: businesses have not returned to previous levels of profit, many businesses have disappeared and others had reconfigured fundamentally their strategies, interest rates have fallen, asset prices have decrease, households still face low family budgets being affected partly by the decline in income and partly by the unemployment, many old workers have been threatened by losing their jobs thus retiring earlier, unemployment rose unexpectedly and even today is extremely high, especially among young people and at these problems are added new waves of biblical proportions of immigrants from the Middle East.

Macroeconomic policies, like fiscal and monetary policy, can improve these sorts of shortcomings, and in addition to discretionary instruments, the non-discretionary instruments, like automatic stabilizers can counteract, in crisis situations, the business cycle downturn and sustain aggregate demand. It can be identified two forms of macroeconomic policy responses to instability in an economy: through discretionary policy or through the automatic stabilizers. The effect of these automatic stabilizers is to create macroeconomic drag during periods of unusually powerful growth and macroeconomic boost during periods of very poor growth or negative growth. In fiscal and social fields, as automatic stabilizers, they are known for example the progressive income taxes, unemployment insurance benefits, social security and disability compensations etc. When we are looking to the monetary policy, the usual discretionary instruments may include the open market operations, key interest rates, reserve requirements and credit control, while the most known automatic monetary stabilizer is the floating exchange rates.

Thus, this article aims at analyzing possible automatic monetary stabilizers especially in terms of theory but also the article tries to offer some validation by analyzing the exchange rate automatic monetary functioning in some non-euro area countries, including Romania.

Description of the problem

In times of economic expansion or at least with sustainable economic growth stages, macroeconomic policies are often irrelevant for the public opinion, for politicians, for annalists or

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even for researchers but when recession or depression strike the normalizing (or the shock absorbent) effect of automatic stabilizers becomes very important. A reduction of operational costs is important, also fiscal and monetary stimuli are useful, but usually is not took into consideration the fact that an important part of stabilisation effect is achieved through automatic stabilisers. Their role should be conceived and better designed especially in times of economic quietness or macroeconomic soundness and it should be effectively exploited in times of tribulation, thus testing the dosage or the quality of the stabilizers.

Although the costs of using automatic stabilizers are reduced or even zero, unlike discretionary measures or instruments, the automatic stabilizers have limited use due to the lack of sufficient understanding of the way they operate and due to the fact that is more easy to find classical solutions than to rethink problems in order to find a variety of alternative better solutions.

There is not much theoretical and applied research papers on how the automatic stabilizers function in Romania and where there are, they focus on automatic fiscal stabilizers. Taking into account the above, this article tries to bring some light on the theory and the implementation of the concept of automatic monetary stabilizers, especially in our country.

Literature Review

Many papers and studies identify and analyze the behaviour of automatic stabilizers in different periods of time and in different part of the world shedding some light on the concept of automatic stabilizer and the way automatic stabilizer function (like: Egle (1952), Eilbott (1966), Eaton and Rosen (1980), Bayoumi and Masson (1995), van den Noord (2000), Blanchard (2000), Bourguignon, F., Spadaro, A., (2006), Dolls, M., Fuest, C., Peichl, A. (2010), Dinga and all (2011), Ghilarducci, T., Saad-Lessler, J. and Fisher E. (2011), Hofer, Hanappi and Müllbacher (2012), etc.); mostly, these papers concentrate only on the fiscal-budgetary (including social) automatic stabilizers.

Although it talks often about fiscal automatic stabilizers, it appears to be more effective the monetary automatic stabilizers. Firstly, the implementation of monetary automatic stabilizers can be installed very fast and more efficient. Secondly, because their design and implementation is done by specialists and not by politicians, they have a better substantiation. Thirdly, monetary policy has rather a long-term vision than a short or medium-term view, as in the case of the stabilization instruments conceived by the government. But regardless of whether it functions the monetary or fiscal stabilizers, all of them should be: temporary (thus avoiding growing deficits and inflation), targeted (especially design to serve those who are in deep needs), at the right time (when the economy is still below potential), it must bring a natural feeling in the economic turn (without sudden and strong changes, even if they are positives) and must be rapid, flexible and/or mobile (to be implemented quickly in the needed segment of the economy).

Monetary automatic stabilizers can be conceived by the way is structured monetary policy and financial-monetary system. In good times, monetary automatic stabilizers should contribute to the proper use of stock of money or to fundament the growth of reserves system; in bad times it should prevent the decrease in the liquidity, cushioning the eventual adverse trends determined by a financial crisis. Thus, the *deposit insurance system* (including the guarantee fund) can prevent banks deposits from falling sharply when depositors are in great fear of losing their money, preventing sudden withdrawals of funds that could even lead to bank failures.

Also, *an instrument of dual-function like credit-deposit/saving type* can be a monetary (rather banking!) automatic stabilizer. With the client's consent and under the conditions imposed by him, the deposit account (savings account) - credit account would be designed to be automatically charged with a modest amount of money over a period of time where the economic conditions are good and customer's financial situation is fine. When the economic cycle collapses and the personal finances fall (due to unemployment, job changes, adverse personal events etc.) the instrument is activated to provide the same comfort to the customer as before the adverse events. Customer may choose to cash or not the interest, and if it doesn't, the interest will add to initial deposit. The function of crediting should be activated automatically when the bank's client would ask for a loan based on the previous deposit in order to open a business or to invest in one (especially in the case that he lost his job!) or to cash a regular sum of money on monthly bases

until he can find a job. Today, there are in the banking market various simplistic versions of the instrument, but it doesn't cover the fully automatic stabilizers concept.

It should be noted that the natural functioning of banking market mechanisms it is sometimes disrupted by the state by taxing the interest. Thus, the tax on interests interferes with the natural process of lending and savings by discouraging movement of capital through banks, thereby encouraging the money at the "mattress" or even black economy.

At the same time, in credit agreements, certain contractual clauses allowing postponement of payment on a certain period of time in case of unemployment, against a background of economic downturn, may facilitate the automatic stabilization function of both - the financial situation of the client and of the bank and also, in the case of a multiplication effects, of an important part of the economy.

Returning strictly to the monetary policy, according to Cerna (2014), in the case of targeting monetary aggregates they can prove an automatic stabilizer character when the economy faces a negative shock in demand (a version of the IS-LM model constructed by Poole) and the central bank must maintain constant the monetary supply in order to offset the reduction in global demand. This involves lowering interest rates but even so, according to the author, it is not entirely capable to restore the full labor employment. In these conditions, a proper model would be The Aggregate Demand – Aggregate Supply Model (AD-AS) which might compensate entirely the demand shock through a reduction in interest rates in order to offset the shock.

Other visions deny the current banking model (with two levels), considering it as inappropriate for the monetary automatic stabilizers to function. Thus, Dowd (1988) states that a stabilization mechanism is automatic when operate in the "free banking" monetary system (an idea supported also by the Austrian school), eliminating many drawbacks caused by a monetary system under the patronage of the central banks ("[…] At first this intervention takes the form of establishing a government-sponsored bank with a monopoly over note issues. Regulations are also imposed on other banks. These interventions prevent a clearing system from developing and make the private sector banks more vulnerable to shocks, thus undermining the stability of the banking system. The state also frequently turns to the private banking system for forced loans when there is a fiscal crisis (such as a war), and this pressure further weakens and destabilizes it. By this stage public concern about the instability of the banking system has become acute, and the state feels obliged to intervene further to try to stabilize the monetary system, Banks' activities are then regulated and supervised to improve their "safety and soundness." This intervention increases the instability even more and we end up with the monetary system we have today" (Dowd, 1988)). However, it can be noticed that, in time, central banks have distanced themselves from the interventionist policy of the state and they are approaching to an equidistant and rather stabilizer monetary system, but being still far enough from the 1920s previous regime, using regulations and instruments to stabilize the monetary system and economy rather on short-term than on long-term (like in a paradigm of a durable development vision).

It must be said that even the *quantitative easing* (*QE) strategy could be design as an automatic stabilizers tool* if one of the problems of economic collapse might prove to be the sharp and strong decline of liquidity. The threshold at which this method would automatically go into action might prove difficult to establish, in the sense that it should be low enough to get close to the critical threshold of entering into a solvency crisis, but still high enough to temper or even to reverse the downturn of the economic cycle. The QE is one of the many unconventional monetary policies used especially when nominal interest rate may prove ineffective; thus, trough QE central bank tries to expand monetary base by acquisition of different financial assets from commercial banks. If QE remains a discretionary method, as at the present, it can create strong disturbances offering too much liquidity, when and/or where it is not needed. This weakness of using QE (especially by Fed) is analyzed by Palley (2014), which is stating that *Asset Based Reserve Requirements (ABRR)* can bring more benefits and fewer distortions both in monetary policy, in financial markets and in the economy. According to the author ABRR "it addresses the problem of asset bubbles that caused the financial crisis. Furthermore, ABRR have particular benefits for Europe because they can help address the loss of national monetary policy resulting from the creation of the euro. […]ABRR require financial firms to hold reserves against different classes of assets, with the regulatory authority setting adjustable reserve requirements on the basis of its concerns with each asset class.

ABRR are easy to implement, use the tried and tested approach of reserve requirements, and would fill a major hole in the existing range of financial policy instruments. However, maximum effectiveness of an ABRR approach requires system-wide application to diminish possibilities for avoidance that can contribute to instability. […]To fully succeed, reserve requirements must therefore be set by asset type, not by who holds the asset. […]ABRR are more flexible than capital standards because they impose reserve requirements rather than equity requirements and they are also counter-cyclical rather than pro-cyclical. […] ABRR also act as automatic stabilizers. When asset values rise or when the financial sector creates new assets, ABRR generate an automatic monetary restraint by requiring the financial sector come up with additional reserves. Conversely, when asset values fall or financial assets are extinguished, ABRR generate an automatic monetary easing by releasing reserves previously held against assets. ".

According to economic and monetary theory, one of the most important automatic monetary stabilizers is *floating exchange rate*. Floating exchange rates are acting as automatic stabilizers when a negative supply or demand side shock is affecting the economy and the national currency is depreciating (while because of the significant capital outflow, the foreign currency is appreciating), the exchange rate will rise, leading to a fall in export prices, raising automatically the competitiveness of the exported goods. If foreign demand is price elastic, the revenue from export will grow, and if the exports are increasing significantly for an economy, they can improve the balance of trade, restoring, by the multiplier process, the internal aggregate demand, the income and the employment in that economy.

Regarding the exchange rates as automatic stabilizers, Krugman and Obstfeld (2003) asserted the idea that the rapid adjustment of market-determined exchange rates could support the countries to maintain internal and external equilibrium in the face of aggregate demand changes, even when monetary policy experienced shortages.

Under a fixed exchange rate regime in the situation of the reduction of the demand for a country's exports, it is necessary a reduction of the money supply, which might decreases the output, keeping the economy further in recession. Usually, it is believed that the fixed exchange rate might help taking inflation down: firstly, by international price pressure, which would exert a tight discipline on domestic price increases and secondly, by shift expectations from an inflationary setting to a price stability regime. Hhowever, a fixed exchange rate can generate macroeconomic imbalances that may compromise the initial result of low or stable inflation. Also, under a fixed exchange rate regime the inflation might be easily imported from a country's trade partners. It is also true that, though floating exchange rates regimes might act as automatic stabilizers, it can bring excess of volatility (larger and/or more frequent exchange rates fluctuations or even currencies speculative movements) and might not prevent the occurrence of obstinate and wide current account deficits. Even more, according to Mundell (1963): "Fiscal policy thus completely loses its force as a domestic stabilizer when the exchange rate is allowed to fluctuate and the money supply is held constant. Just as monetary policy derives its importance as a domestic stabilizer from its influence on capital flows and the exchange rate, so fiscal policy is frustrated in its effects by these same considerations." A similar idea is formulated by Gustafsson (2009) for Sweden: "The deregulation of the financial sector combined with the introduction of a floating exchange rate is a sign of decreasing effectiveness of both fiscal policy, in general, and automatic stabilizers. This effect is probably reinforced by the increase in the degree of trade openness. The replacement rate in the unemployment insurance system has decreased over time, thus lowering the stabilizing effect on private consumption. Also the composition of aggregate demand has changed in a way that should have slight decreasing effects on the effectiveness of automatic stabilizers due to the share of stabilized components decreasing. The only development pointing in the direction of increased effectiveness of automatic stabilizers was the increase in government size."

However there are voices that state the fact that floating exchange rates also free the government or central bank from "defending" the exchange rate, taking care rather of problems like unemployment or inflation or any other internal important issue. Also, floating exchange rates have helped countries to overcome different external shocks (e.g. oil price increase), giving to the governments more flexibility in actions and requiring lower foreign reserves compared with fixed exchange rate regimes.

According to the Obstefeld (1986): "[…] Fixed exchange rates can be better automatic stabilizers than are floating rates when most shocks originate in asset markets; but when goods-market shifts drive macroeconomic fluctuations, floating rates generally have an advantage. And the evidence is that many disturbances of the early 1980s originated in goods markets. The stability advantages of floating rates in these circumstances, however, will be distributed unevenly among the economy's sectors. This misallocation is the root of the misalignment problem."

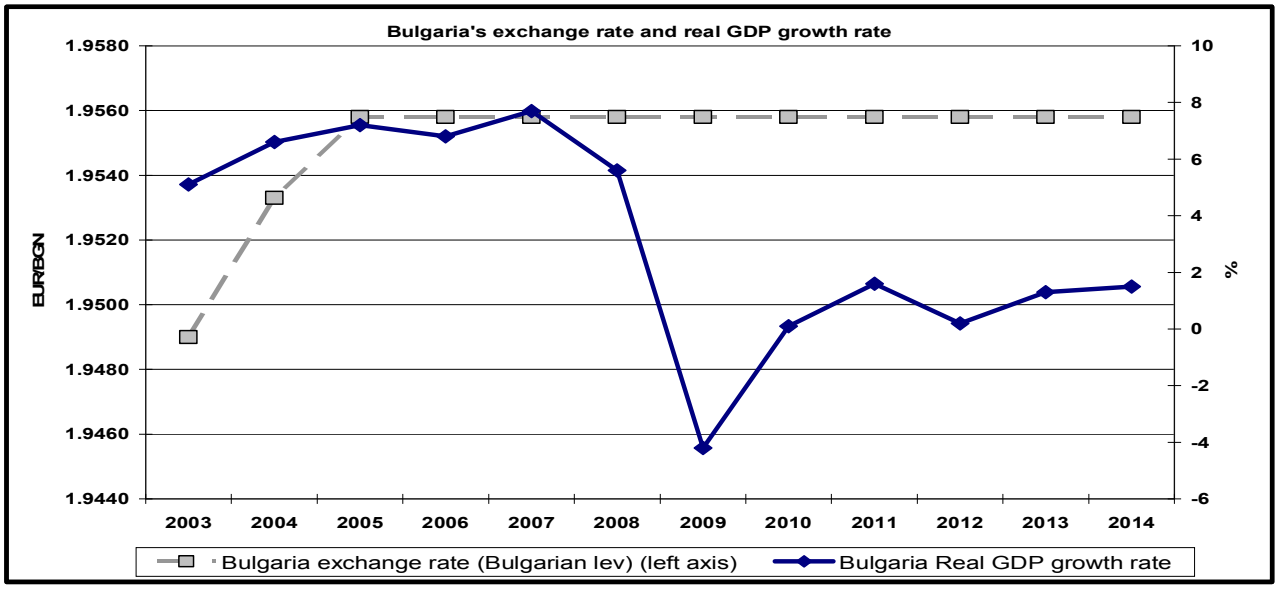
On the other hand, Aysun (2006) assert that: "[…] exchange rate regimes that limit the effect of external shocks on bank balance sheets and hence on foreign interest rates are better in terms of limiting output volatility in emerging markets with high foreign currency exposure. The results should not be interpreted as a case for fixed regimes but rather a case against perfectly flexible regimes in emerging markets. This analysis suggests that countries with shallow financial markets that have foreign exchange vulnerabilities should limit exchange rate fluctuations until their markets are developed enough to sustain a flexible regime or shift towards a monetary union or even dollarization." Also, the author finds "larger welfare losses under flexible regimes".

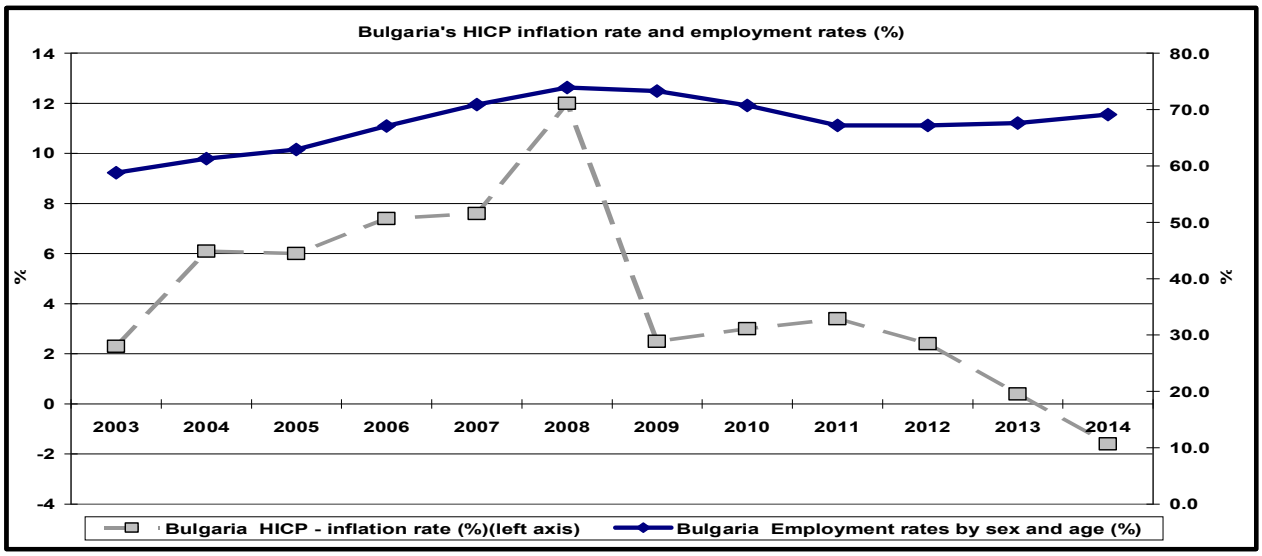
Methodology and data sources

Being unclear if there is a visible connection between exchange rate regimes and the way of real GDP turns around, the article using a logical analysis tries to find possible connections. Firstly, concerning exclusively the automatic monetary stabilizers, the paper makes a foray in what they are and what they suppose to do. Also, using Eurostat data, the article tries to show some links between real GDP evolution and exchange rate movements in several countries outside of euro area (in or out of ERM2) or even outside of European Union (Norway). I selected countries with fix and flexible exchange rate regimes to see if there are visible differences between them and also I selected countries with recognized strong fiscal stabilizers and countries with weak fiscal stabilizer to see if can be discussed as interfering with the exchange rate. Thus, though it is taken into consideration the work of other researchers, this article tries to find its own path in explaining the realities.

Results obtained

It is known that, automatic stabilizers may be defined as those instruments which adjust automatically to the economic cycle, but when we look at the behaviour of the exchange rates and of real GDP growth rate in several countries outside of euro area and even from outside of EU for a period from 2003 – 2014, the above statements are not so clear (see Fig.1, Fig.2, Fig.3). Usually, under floating regimes, the exchange rates are acting as automatic stabilizers when a negative demand side shock seen by a downturn in real GDP growth rate is affecting the economy raising exchange rate and implicitly the competitiveness of the national products exported, thus the exports will rise and aggregated demand and the employment. Under fixed exchange rate regimes it is believed that inflation might be considerably reduced. Seeing the Fig.1 of the countries with fixed exchange rate (in or outside of ERM2), like Bulgaria and Denmark, we can say that the elements that supposed to be improved by the exchange rate conduct have still a lot of structural rigidities, which don't allow them to react well enough to changes in economic cycle. Although both countries have registered a collapse in inflation, the employment rate also suffered heavily, especially, surprisingly, in Denmark, which is operating within the Exchange Rate Mechanism 2 (ERM2) since 1999 and must manage together with ECB the exchange rate in a semi fixed regime of plus-minus 2.25%.


Bulgaria's exchange rate and real GDP growth rate
EUR/BGN
%
1.9580
1.9560
1.9540
1.9520
1.9500
1.9480
1.9460
1.9440
10
8
6
4
2
0
-2
-4
-6
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
Bulgaria exchange rate (Bulgarian lev) (left axis)
Bulgaria Real GDP growth rate


Bulgaria's HICP inflation rate and employment rates (%)
%
%
14
12
10
8
6
4
2
0
-2
-4
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
2003
2004
2005
2006
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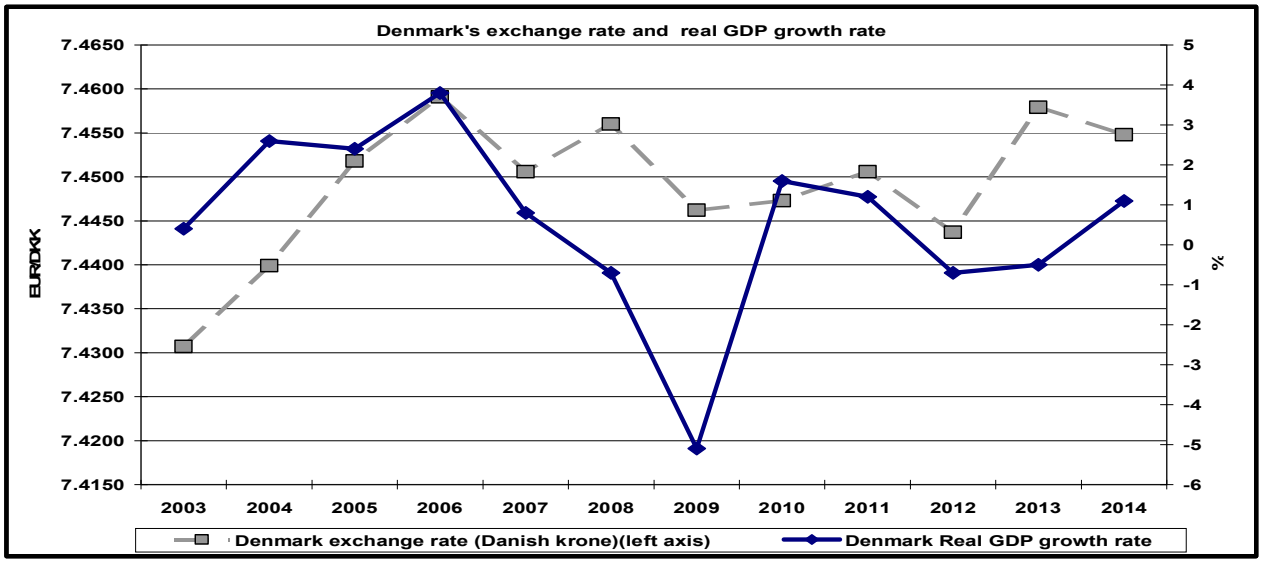
2008
2009
2010
2011
2012
2013
2014
Bulgaria HICP - inflation rate (%)(left axis)
Bulgaria Employment rates by sex and age (%)


Denmark's exchange rate and real GDP growth rate
EUR/DKK
%
7.4650
7.4600
7.4550
7.4500
7.4450
7.4400
7.4350
7.4300
7.4250
7.4200
7.4150
5
4
3
2
1
0
-1
-2
-3
-4
-5
-6
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
Denmark exchange rate (Danish krone)(left axis)
Denmark Real GDP growth rate

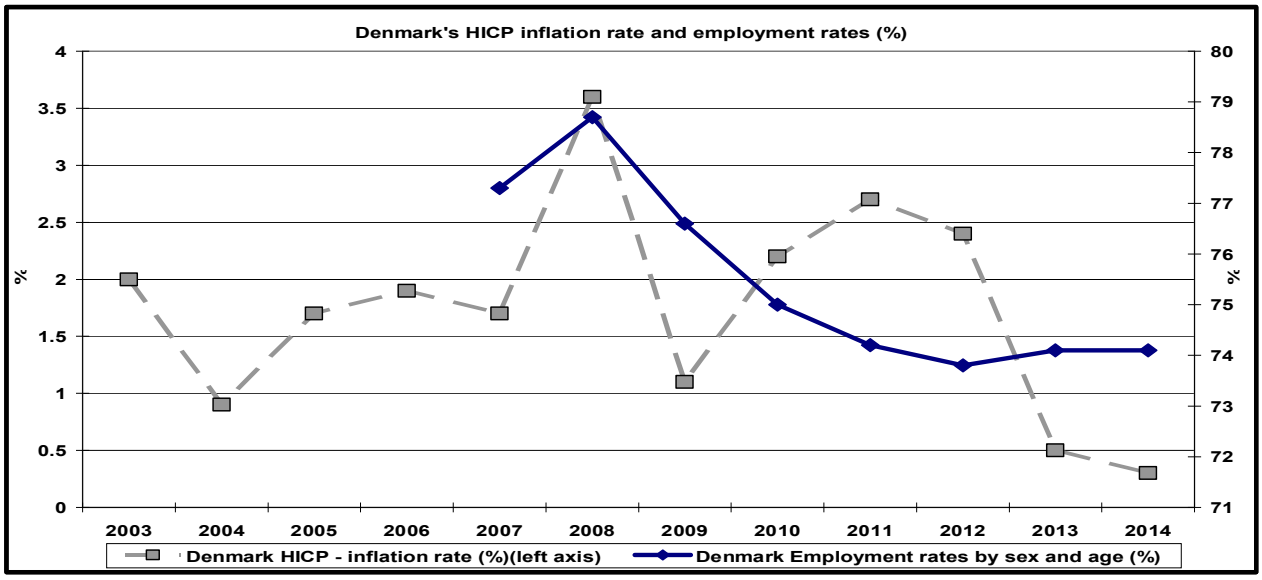
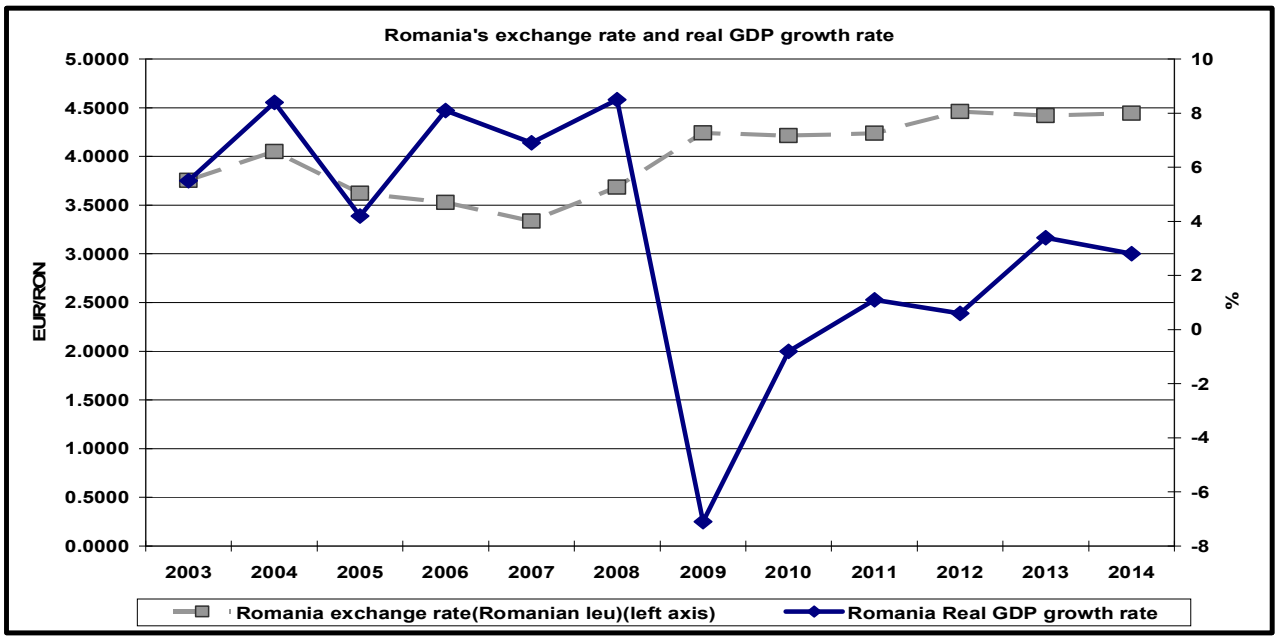


Fig.1. *Bulgaria and Denmark exchange rates and the evolutions of their supposed effects in economy including the conduct of real GDP growth rate*
Source: Eurostat data

When we look at the evolution of floating exchange rates from Romania and Poland (see Fig.2), it can be seen a kind of stabilization mechanism of the exchange rate fluctuation over the real GDP growth rate but is uncertain if is due to the discretionary or un-discretionary monetary policies actions. Also, the exchange rate contributed to the decrease in inflation (in Romania it looks like a natural deflationary process started in 2000 and reinforced since 2008) but the most important it seems like the international crisis started in 2008-2009 had no effect over the trend of the employment rates (they are continuing to grow smoothly).



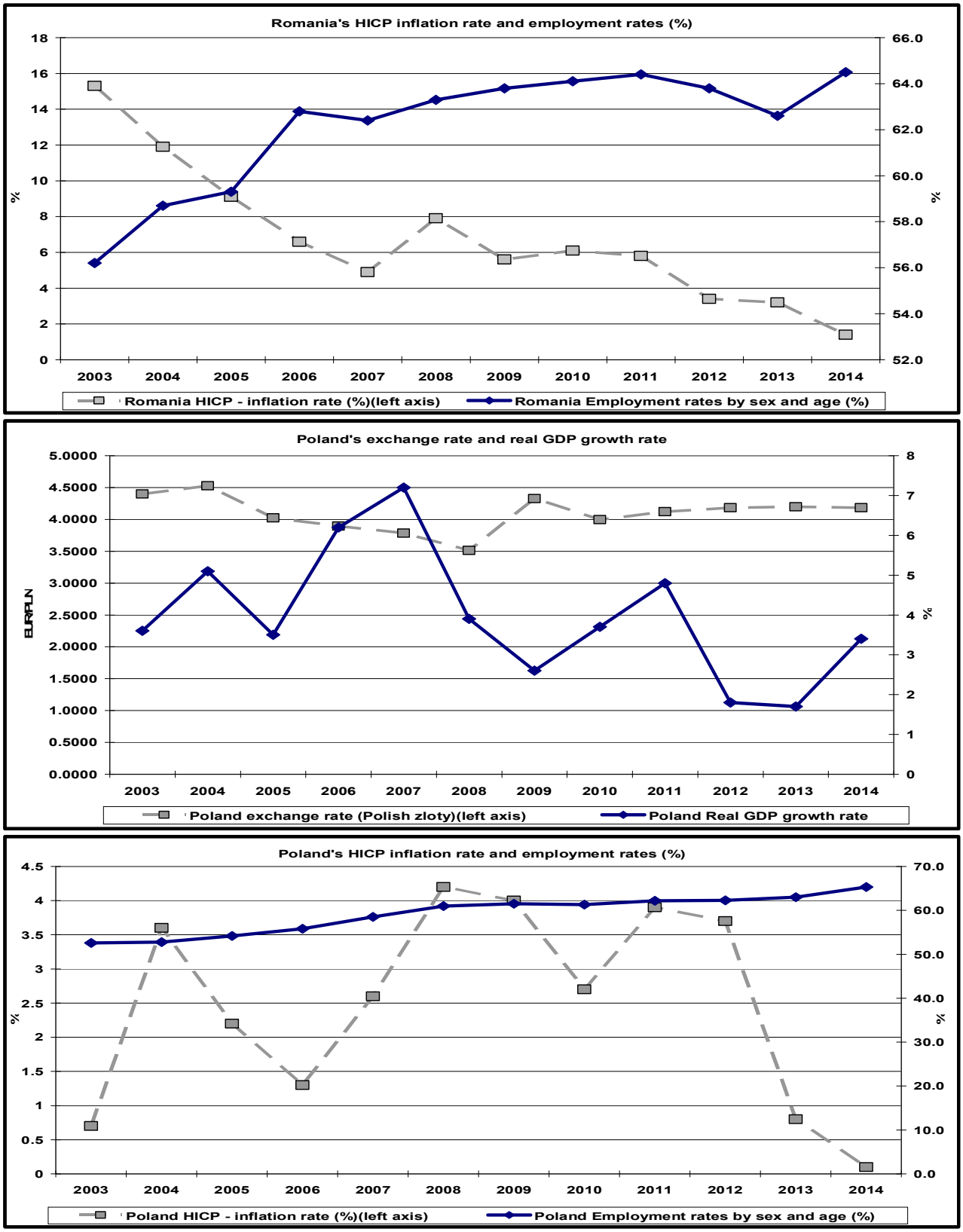
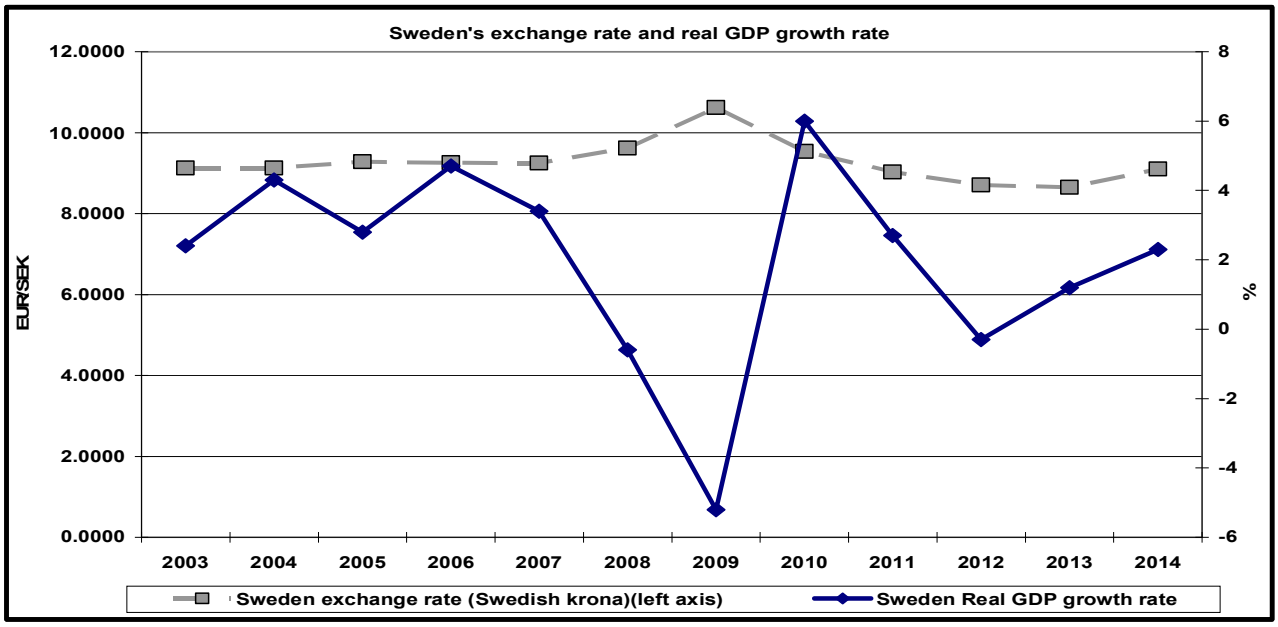

Romania's HICP inflation rate and employment rates (%)
%
%
Romania HICP - inflation rate (%)(left axis)
Romania Employment rates by sex and age (%)
Poland's exchange rate and real GDP growth rate
EUR/PLN
%
Poland exchange rate (Polish zloty)(left axis)
Poland Real GDP growth rate
Poland's HICP inflation rate and employment rates (%)
%
%
Poland HICP - inflation rate (%)(left axis)
Poland Employment rates by sex and age (%)

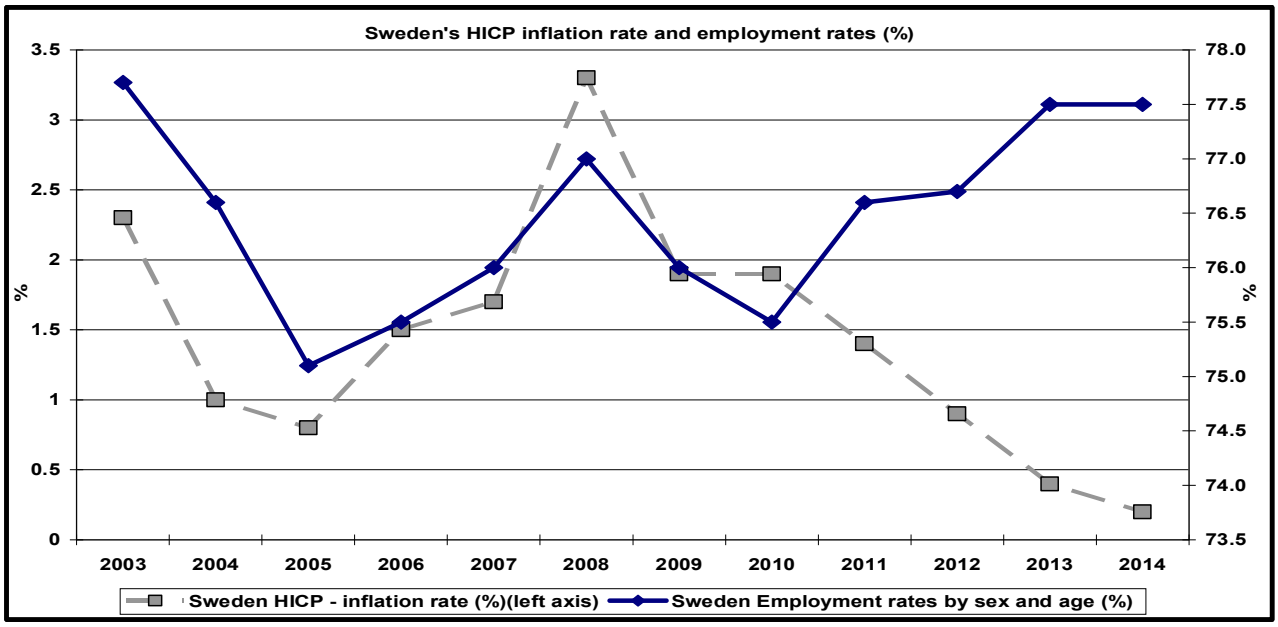
Fig.2. *Romania and Poland exchange rates and the evolutions of their supposed effects in economy including the conduct of real GDP growth rate*

Source: Eurostat data

If we take into consideration countries with strong fiscal stabilisers according to the theory (see Fig. 3), from EU (but outside of euro area) like Sweden and from outside of EU like Norway but with floating exchange rate regimes, we can see that exchange rates moved rather according to the conduct of automatic stabilisers but the effects on the inflation and employment rate are rather

inconclusive (for Norway there are insufficient date for employment rate!). In Sweden it can be seen that only from 2010 the inflation decreased heavily and the employment rate grew strongly but we cannot say that is an effect of the exchange rate regime and conduct or it is due to discretionary or un-discretionary actions. It should be said that since 1992, the Central Bank of Norway abandoned the fixed exchange rate, choosing a rather a managed float exchange rate regime in order to protect NOK (Norwegian krone) of speculative attacks from early 1990s. Also, the Swedish krona doesn't participate in ERM II, being under a flexible exchange rate regime and registering rather strong volatility. The Norway krone suffered important depreciations from seventies until nineties and under global financial crisis it exceeded the 10.0 NOK for 1 EUR (decreasing mildly afterwards), but even so the investors were able to realize important gains amid a stable economy and strong public finances.





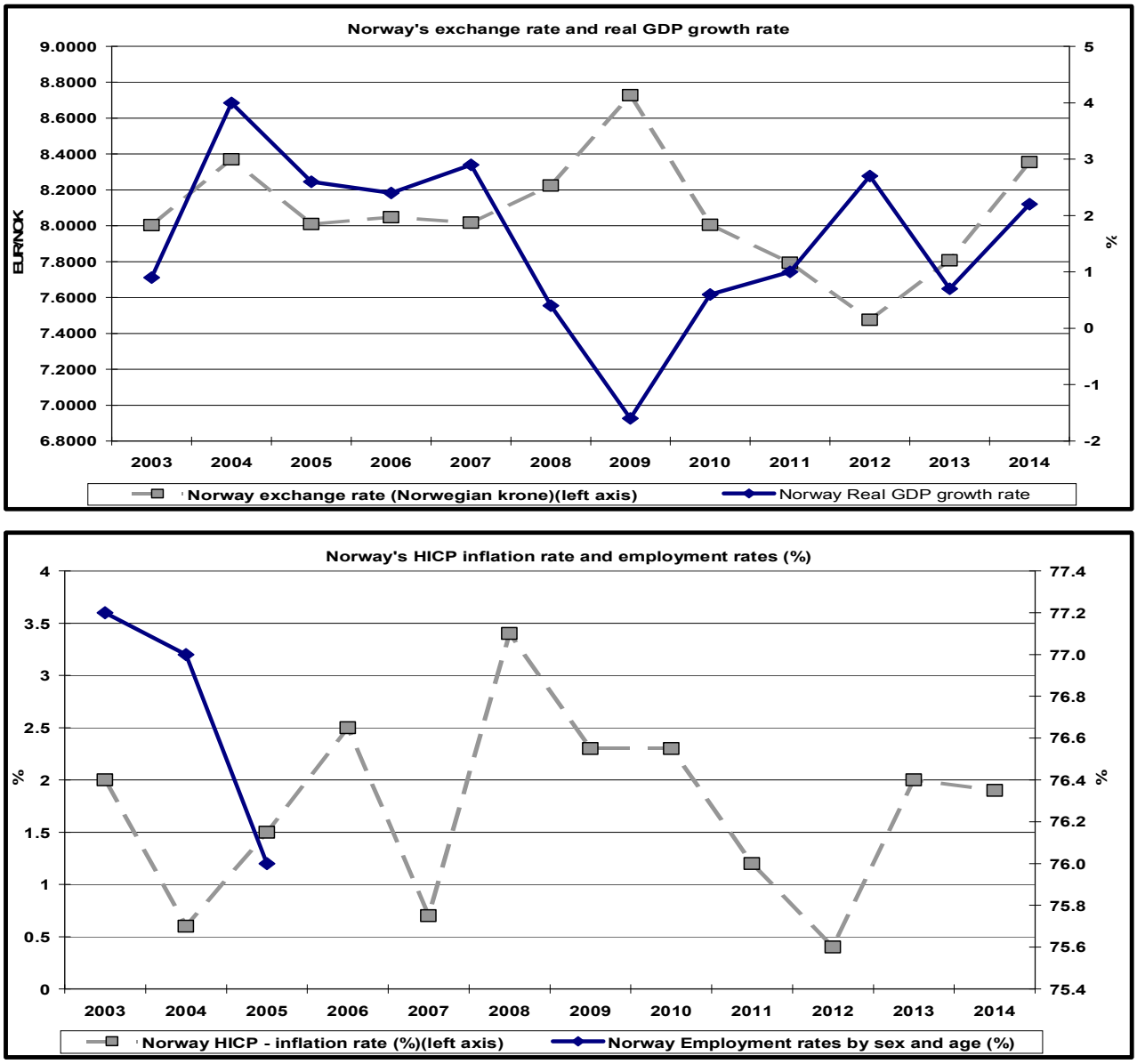

Norway's exchange rate and real GDP growth rate
EUR/NOK
%
Norway exchange rate (Norwegian krone)(left axis)
Norway Real GDP growth rate
Norway's HICP inflation rate and employment rates (%)
%
%
Norway HICP - inflation rate (%)(left axis)
Norway Employment rates by sex and age (%)

Fig.3. *Sweden and Norway exchange rates and the evolutions of their supposed effects in economy including the conduct of real GDP growth rate*

Source: Eurostat data

Conclusions

Many elements like legislative, political and administrative factors may cause many problems in the natural function of an economy and can constitute an important argument for avoiding the use of discretionary policies and thus making more viable the implementation of the automatic stabilizers. There are no visible deficiencies in the use of automatic stabilizers, being practically costless.

Usually, in literature there are analyzed mostly the automatic fiscal stabilizers, monetary automatic stabilizers being treated rather marginally or unimportant. Even so, monetary automatic stabilizers can prove their efficacy in reducing inflation, unemployment, current account deficits or even public deficits, one such example being the exchange rate.

Even if it works under a fixed or flexible exchange rate regimes, the exchange rate can prove itself useful in the stabilization (relatively rapid) of the world economies. However, it should be noted that the exchange rate is not a purely monetary automatic stabilizer due to the possibility of the monetary authority interventions in its operation. This is confirmed by a logical and rather simple analysis of exchange operation for a number of countries outside the euro area and even outside of

European Union (Norway). Also, the analysis aims at surprising the conduct of exchange rate and its effect on economy under the fixed or flexible exchange rate regimes.

There can't be drawn any clear conclusion (for or against) the exchange rate to operate under a fixed or flexible exchange rate regimes, taking into account its stabilizing role for the economy. Thus, considering the decisions made over time by the central bank there are arguments for and against different types of exchange rate regimes.

Therefore, besides deepening the study of monetary stabilizers already identified, future work will take into consideration the necessity of finding many other monetary automatic stabilizers, who can operate more rapidly and more efficient in stabilizing the world economies or different parts of it.

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RETHINKING THE INSTITUTIONAL FRAMEWORK FOR FINANCIAL STABILITY IN THE REPUBLIC OF MOLDOVA

Dorina CLICHICI [24]

Abstract

The aim of this article is to identify the arrangements of the accountability of regulatory institutions and the deficiencies in pursuing financial stability within the banking system of the Republic of Moldova. Financial stability policies are a missing ingredient from the current policy framework, and there is a too huge gap between banking supervision and the goal of financial stability assuring. The article have highlighted an intense need for strengthening financial stability framework in the country through three main actions: redefining the central bank's role, strengthening the crisis management and strengthening the deposit insurance system. This article offers policy recommendations in building a stronger institutional framework for financial stability in the Republic of Moldova.

Keywords: financial stability, institutional framework, banking system

JEL classification: G28, G21

1. Introduction

The integrity of the banking system depends on the functionality of the institutional framework for financial stability. This framework should ensure the quality of preserving the financial stability. Oosterloo and Haan have distinguished five different elements that make up a framework for the financial stability function (Oosterloo and Haan, 2003, p. 5):

1.the *objective* of maintaining financial stability,
2.the *assessment* of risk to financial stability,
3.the *instruments* that can be used in case of a misalignment between the assessment and the objective,
4.the *decision-making process*, and
5.the *accountability* of the institution that is responsible for maintaining financial stability.

The process of ensuring financial stability involves public institutions that share responsibilities. The responsibility for financial stability is widely considered as an essential characteristic of central banking. Historically a dominant concern for central bankers has been not just price stability, but also *financial stability*. Goodhart argues that the original motivation for creating central banks in many countries was to temper the financial crises associated with unregulated "free banking" regimes (Goodhart, 1987). Achieving monetary and financial stability requires that appropriate anchors be put in place in both spheres (Borio and Lowe, 2002). The role for financial stability policy arises because the private choices of unregulated banks with respect to money creation are not in general socially optimal (Stein, 2011). Ojo argues the need for redefining the central bank's role in the aftermath of the financial crisis, through the extension of central banks' roles in macro prudential supervision. The need to address systemic risks in a more efficient manner is one the reasons attributed to why greater emphasis on prudential supervision at macro level is of vital importance (Ojo, 2010).

Financial stability policy and prudential supervision at macro level is a missing ingredient from the current policy framework in the Republic of Moldova, and there is a too huge gap between banking supervision and the goal of financial stability ensuring. This gap has induced the necessity of extension of central bank's role in the management of financial system and the need for rethinking the present institutional framework for financial stability. Also there is no *assessment* of risk to financial stability made by the NBM. Many countries (24 advanced and 36 emerging economies) provide such assessments through Financial Stability Reports or Financial Stability Review published annualy or semi-annualy (according to the Center for Financial Stability).

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The paper is organized as follows. Section 2 describes the main problem regarding maintaining financial stability. Section 3 describes the situation of the Moldovan banking system and the effects of a deficient institutional framework for financial stability. Section 4 describes the structure of the institutional framework for financial stability and its shortcomings. Conclusions detail the main policy recommendations.

The situation in the country on the institutional framework for financial stability is evaluated based on the review of existing official documents and laws regarding the institutional framework of the banking system, review of IMF assessments, review of Kroll Inc. Report[25], analysis of statistical data related to the banking system and macroeconomic situation, as well as qualitative judgments. Macroeconomic data used for the analysis come from Moldovan statistical database and the Ministry of Economy reports - all available online. Banking data are taken from the database of the National Bank of Moldova and includes data on 14 Moldovan banks.

2. Description of the problem

The main problem regarding maintaining financial stability is that there is no unambiguous definition of financial stability and that the responsibility for financial stability is not explicitly formulated in laws. Also the *accountability* of the institution that is responsible for maintaining financial stability is not stipulated in laws.

According to Subbarao explicit inclusion in laws of the responsibility for financial stability would be redundant, because financial stability is a necessary condition for achieving the conventional central bank objectives relating to inflation, output, and employment. On the other hand, there is a growing view that unless financial stability is explicitly included in the mandate of central banks, it is likely to not be taken into consideration (Subbarao, 2010, p. 27). Another problem regarding the responsibility for financial stability is that defining financial stability in a precise, comprehensive, and measurable manner is proving to be difficult.

According to the questionnaire provided by Oosterloo and Haan, from 28 questioned Central Banks (CBs), only the Canadian CB has an official definition (as stated in law) of financial stability and systemic risk. The rest 27 CBs have un-official working definitions provided via their publications.

In the survey provided by the Bank for International Settlements (BIS, 2008, p. 33), 90% of central banks considered that they had full or shared responsibility for financial stability policy and oversight of the financial system. But the legal basis for this responsibility is less clear. The relevant legislation does not specifically mention financial stability or synonyms for a large number of central banks. The responsibility for financial stability is usually inferred from the existence of functions that relate to it: bank regulation and bank supervision, deposit insurance, the provision of safety nets through emergency liquidity assistance, provision of honest broker services, and involvement in the payment system in general. Nevertheless, the CBs indicate in the Oosterloo and Haan's questionnaire that there is a difference between prudential supervision and overseeing financial stability. The most important difference mentioned between both concepts is that prudential supervision is aimed at the proper management of individual financial institutions (*micro-prudential approach*), while maintaining or overseeing financial stability is primarily concerned with systemic risks, i.e. threats to the financial system as a whole or threats to individual institutions that may be contagious to other parts of the financial system (*macro-prudential approach*).

From 28 questioned CBs by Oosterloo and Haan, only for 2 CBs the responsibility for overall financial stability has been stated explicitly in law or some other documents. Republic of Moldova is not an exception on that point. The legislation does not stipulate the objective and the accountability for safeguarding financial stability of the banking sector by the National Bank of Moldova (NBM). Only one official document mentions that NBM contributes to the maintaining of the stability of the banking system and the supervised financial institution through available legal powers - the Memorandum of Understanding on Maintenance of Financial Stability (Memorandum). Also, in the Memorandum is stated the definition of financial stability: "A systemic financial crisis

[25] On 28 January 2015 Kroll Inc. (a corporate investigations and risk consulting firm) was engaged by the National Bank of Moldova to conduct a scoping phase of investigation into certain transactions involving Banca de Economii S.A., B.C. "BANCA SOCIALĂ" S.A. and B.C. "UNIBANK" S.A.

emerges when problems in one or more financial institution are serious enough to have a significant adverse impact on the real economy. Financial stability can be defined as a situation in the economy, characterized by the absence of the disproportions, which may cause a negative correction of the financial markets, emergence of a systemic financial crisis or inability of the financial institutions to maintain smooth financial system operations. Financial stability is maintained by adequate regulations of the current and potential risks, by the effectiveness of the risk management and risk redistribution mechanisms, and by the assurance of the public's confidence to the financial system". According to the Memorandum the National Committee for Financial Stability (NCFS) is established with the overall duty and responsibility of managing and dealing with systemic financial crisis and it will be active until further notice of the Government. However, the NCFS has failed in assuming its main responsibility. The problems that have occurred in 2014 within three financial institutions in the Republic of Moldova have had a significant adverse impact on the real economy and have generated a systemic financial crisis.

3. The situation of the Moldovan banking system for the period 2014-2015

Financial sector of the Republic of Moldova is dominated by the banking system, it accounted for 94.16% of total financial assets and 95.6% of total loans provided by the financial sector at the end of first quarter of 2015[26]. The number of banking institutions during the recent years remained unchanged, with a number of 14 commercial banks, including 4 international banks.

On August 5, 2015, National Committee for Financial Stability has decided to liquidate three local banks (Banca de Economii S.A., B.C."BANCA SOCIALĂ" S.A. and B.C. "UNIBANK" S.A.). Banca de Economii S.A. (BEM) is the bank with the largest network, it was a systemic bank with a state ownership of 56,13%. It was the bank of public sector enterprises and it provided all social payments (pensions, allowances etc.). B.C."BANCA SOCIALĂ" S.A. (BS) also provided banking services to a part of public sector enterprises. B.C. "UNIBANK" S.A. was a small bank affiliated to those two banks. All three affiliated banks comprised 28 percent of banking system assets, equivalent to about 20 percent of GDP. The main problems recorded at these banks were related to deficient corporate governance and deficient credit portfolio management. A significant law infringement took place in the second quarter of the year 2014. According to data provided by NBM, BEM exceeded the limits regarding the exposure to affiliated persons[27], reaching at the end of June a significant share of 34.93%. During the next three months, this value was almost doubled, reaching the amount of 66.22% by the end of the third quarter of 2014. According to Kroll Inc. Report from April 2, 2015, a significant amount of money (750 million US dollars) was provided fraudulent to 5 local companies by these banks with the implication of several off-shore companies in November 2014. Later this amount of money was transfered on off-shore companies' acounts in Latvia.

Approximately for one year NBM has tried to provide a financial restructuring of these three banks, by establishing the special administration regime in November 2014[28] and providing emergency loans. Being aware regarding the situation of the exposure to affiliates, the supervisor has not imposed any remedial action or sanctions. However, prompt corrective action is a key ingredient of successful banking reform (Dziobeck and Pazarbasioglu, 1998, p. 2).

Until august 2015 the NBM has provided emergency loans to these banks in an amount equivalent to 27,1 percent of GDP (an amount of 6,5 billion lei[29]), guaranteed by the Government[30]. The credits

[26] According to IMF data base

[27] According to the NBM regulation total bank exposure to any affiliated person shall not exceed 10% of the bank's Total Regulatory Capital and the aggregate amount of bank's total exposure shall not exceed 20%.

[28] NBM established special administration regime at Banca de Economii S.A. on November 27, 2014, at B.C. "BANCA SOCIALĂ" S.A. - on December 12, 2014, and at B.C. "UNIBANK" S.A. - on December 30, 2014 for a period of 9 months.

[29] In accordance with the Court of Auditors' public hearing of June 25, 2015, the amount of emergency loans provided by the NBM under Government guarantee to those three commercial banks, reached the amount of 6.5 billion lei.

were not reimbursed by the banks. These credits were granted without an assessment of recovery risks and could significantly influence the resistance of the entire budget system, with possible impact on state budget. These costs will be put on the shoulders of taxpayers.

Since end-October 2014 until end-June 2015 the NBM sold 862,34 million US dollars of international reserves[31] (reducing the reserves by 32,5%), about two-thirds of which occurred following the intervention in BEM and BS. As a result the nominal exchange rate has been changed significantly against the US dollar, and total reserves in months of imports have dropped drastically. During the first semester of the year 2015 the national currency has depreciated sharply by 20% against the US dollar. As a result of this depreciation, external state debt in lei increased by 28.8%[32]. The inflation has increased reaching the rate of 8.6% in July 2015 compared to July 2014, thus exceeding the target level of inflation set by the NBM (5% +/-1.5%). The costs generated by the inflation and by the national currency depreciation will have to be supported by the population as a consequence of the eroded value of deposits and as a consequence of a decrease of standard of leaving.

4. Shortcomings of the institutional framework for financial stability in the Republic of Moldova

The institutional structure of maintaining financial stability has been changed in the last decade in several countries (Norway (1986), Canada (1987), Denmark (1988), Sweden (1991), Hungary (2000), Australia (1998), UK (1998), Japan (1999), Korea (1998), Iceland (1999), Austria (2002), Germany (2002)). The financial supervision has been consolidated in a separate agency and there is a clear institutional difference between prudential supervision and maintaining financial stability. Within these countries the CB focuses primarily on the systemic risk issues of financial markets and systems, and supervisory authorities supervise the legal aspects of operations and the individual institutions' risks.

In the Republic of Moldova the institutional structure of maintaining financial stability is the following:

1. The *National Bank of Moldova* (NBM) is responsible for banking supervision. However, the tasks related to financial stability are carried out by the NBM through prudential supervision, through the transmission of monetary and foreign exchange policy measures and through the supervision of the payment system's functioning.
2. The *National Committee for Financial Stability* (NCFS) has the aim to ensure an adequate coordination among the public authorities for taking prompt actions in case of extraordinary financial shocks. Following the creation of the NCFS, the duties of committee members[33] have been established based on the Memorandum from February 28, 2011. The parties have signed the Memorandum regarding the maintenance of financial stability, which determines the measures to fight the causes of systemic financial crisis, to establish the effective procedures of authorities' interaction and to realize a coordinative approach to bring full confidence in financial institutions.
3. The *Deposit Guarantee Fund in Banking System* (DGFBS), a legal person of public law, which compensates the payment of deposits if they become unavailable.

The recent decision regarding the liquidation of three insolvent Moldovan banks is a consequence of several deficiencies in the present institutional framework for financial stability. This decision taken by the National Committee for Financial Stability in August 2015 has revealed a systemic

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[30] According to the Government Decision No. 938 as of November 13, 2014 on ensuring macroeconomic stability in the context of regional conjuncture

[31] According to the NBM data base

[32] According to the Ministry of Economy data base

[33] Committee members: the Government of the Republic of Moldova (Government), the National Bank of Moldova (NBM), Commission on Economy, Budget and Finance of the Parliament of the Republic of Moldova, National Commission for Financial Market (NCFM) and Deposit Guarantee Fund in Banking System (DGFBS).

crisis situation in the Moldovan banking system. Once one of the biggest Moldovan commercial banks, with an important role in the banking sector, with the largest network, is declared to be insolvent by the authorities, there should be identified the causes and the preconditions of this event. This is the main argument for rethinking the institutional framework for financial stability in the Republic of Moldova and finding solutions for eliminating the existing deficiencies.

Shortcomings regarding the activity of the National Bank of Moldova

The basic element that make up a framework for financial stability function stated by Oosterloo and Haan - the objective of maintaining financial stability - is not explicitly formulated in laws in the case of Republic of Moldova. According to the Law on the National Bank of Moldova[34], art. 4. the primary objective of the NBM is to ensure and maintain the price stability. The same article stipulates that without prejudice to the primary objective, the National Bank shall promote and maintain a financial system based on market principles and shall support the general economic policy of the state. The legislation does not stipulate the task of safeguarding financial stability of the banking sector by NBM. Only the Memorandum of Understanding on Maintenance of Financial Stability (Memorandum) mentions that NBM *contributes* to the maintaining of the stability of the banking system and the supervised financial institution through available legal powers[35].

The main preventative instruments for safeguarding financial stability are considered to be the assessments of risk to financial stability (macro-prudential measures) and the regulatory framework and the enforcement of banking supervisory measures (micro-prudential measures). There are serious reasons for elaborating and publishing the assessment of financial stability, (Oosterloo and Haan, 2003, p.18):

1.they contribute to the overall stability of the financial system;
2.they strengthen cooperation on financial stability issues between the various relevant authorities;
3.they increase the transparency (and accountability) of the financial stability function.
In the Republic of Moldova the regulator does not provide and not publish an assessment of risk to financial stability. NBM does not elaborate a Financial Stability Report which would assess the main risks to financial stability. None macroprudential measures or early warning systems are described or published by the regulator. CBs should pay attention to macroprudential analysis in order to identify systemic indicators and trends that usually provide an early warning of banking fragility.

The only preventative instrument for mantaining financial stability that the NBM uses is the enforcement of banking supervisory measures. Article 5 **(**d) of the Law on the National Bank of Moldova stipulates that one the task of the NBM is "to license, supervise and regulate the activity of financial institutions".

The Memorandum from February 28, 2011, article 9 (a), stipulates that „The NBM contributes to the maintaining of the stability of the banking system and the supervised financial institutions by: setting prudential norms, other provisions and limits regarding the activity of financial institutions, supervising their activity, including the quality of financial services offered to the consumers".

Despite of these stipulations the events discribed in previous section revealed a *law quality of banking supervision*. There were ignored the following Basel Core Principle for Effective Banking Supervision (Basel Committee on Banking Supervision, 2012):

- The first Principle (*Responsibilities, objectives and powers*): NBM has not undertaken timely corrective actions to address compliance with laws and to address safety and soundness concerns especially in the situation of those three banks (Banca de Economii S.A., B.C. "BANCA SOCIALĂ" S.A. and B.C. "UNIBANK" S.A.).

- Principle 2 (*Independence, accountability, resourcing and legal protection for supervisors*): The accountability determinant towards the NBM tasks' discharge was ignored. One of the essential criteria for effective banking supervision indicates that the supervisor publishes its objectives and is accountable through a transparent framework for the discharge of its duties in relation to those objectives.

[34] Law on the National Bank of Moldova No.548-XIII of July 21, 1995.

[35] This document establishes the duties of National Committee for Financial Stability members.

- Principle 6 (*Transfer of significant ownership*): Until now the NBM has not obtained the identities of all beneficial owners of shares being held by nominees, custodians and other vehicles that might be used to disguise ownership in banks. Risks to systemic financial stability are significant due to governance problems in the banking system.

- Principle 8 (*Supervisory approach*): NBM has not developed until now a forward-looking assessment of the risk profile of individual banks, proportionate to their systemic importance. It has not identified, assessed and addressed risks emanating from the system as a whole. The authority does not have a framework in place for early intervention; and does not have plans in place, in partnership with other relevant authorities, to take action to resolve banks in an orderly manner if they become non-viable.

- Principle 9 (*Supervisory techniques and tools*) and Principle 11 (*Corrective and sanctioning powers of supervisors*): The NBM should have required BEM to take action to mitigate any particular vulnerability that could have the potential to affect its safety and soundness, what has not happened. The supervisor could have used a variety of tools to regularly review and assess the safety and soundness of banks and the banking system.

Shortcomings regarding the activity of the National Committee for Financial Stability

Crisis management should involve joint cooperation. According to the Government Decision[36], in 2010 was established the NCFS, in order to ensure an adequate coordination among the public authorities and in order to achieve prompt actions in case of extraordinary financial shock. This Decision stipulates that one of the responsibilities of the NCFS is managing extraordinary financial crisis. However, the NCFS has failed to manage the systemic financial crisis which occurred in the Republic of Moldova and to ensure an adequate coordination among the public authorities for taking prompt actions. Only one action has been taken by the NCFS during the period of rescuing those three commercial banks: the recommendation to provide emergency loans to banks by the NBM in case of necessity in the amount of 9500 mil. lei (an equivalent of 678 mil. US dollars) and to guarantee those loans by the state[37]. In august 2015 NCFS has taken the decision to liquidate three local banks (Banca de Economii S.A., B.C. ”BANCA SOCIALĂ” S.A. and B.C. ”UNIBANK” S.A.).

The last Country Reports carried out by the IMF in 2014 (IMF, 2014) in the Republic of Moldova have revealed the following deficiencies regarding the activity of the NCFS:

NCFS lacks focus and is not forward looking;

There is little evidence of contingency planning and testing of processes and powers;

Coordination between the member agencies is limited;

There are significant gaps and deficiencies in the statutory powers required for cost-effective bank crisis resolution.

Shortcomings regarding the activity of the Deposit Guarantee Fund in Banking System

The DGFBS[38] could contribute to public confidence in the system and thus limit contagion from banks in distress. However this key element of the framework for systemic protection is weak. Several aspects of the deposit insurance scheme require strengthening.

First, there is no clear mechanism stipulated in the legislation on providing a line-of-credit to the DGFBS from the Ministry of Finance according to international standards. Although the list of funding sources includes the possibility of contracting loans from the Ministry of Finance by the DGFBS. Second, there are no mechanisms on including the NBM as an additional source of back-up funding for the DGFBS. Third, the limit of the guaranteed amount of deposits is insignificant.

[36] According to the Government Decision No.449 as of June 2, 2010 on the establishment of the National Committee for Financial Stability

[37] According to the Government Decision No. 938 as of November 13, 2014 on ensuring macroeconomic stability in the context of regional conjuncture

[38] It was established in 2004 according to the Law on guaranteeing deposits of individuals in the banking system No. 575-XV of 26.12.2003.

Currently in accordance with the law[39], if the deposits of an authorized bank become unavailable, the Fund under article 19, guarantees their payment to each depositor, regardless of their size, number and the currency, in an amount of 6000 MDL (equivalent of 285 EUR).

At the end of June 2015, the total amount of financial resources of the DGFBS was 231,8 mil. lei (equivalent of 10.5 mil. EUR). This amount of resources could compensate only a part of guaranteed deposits of the banks under liquidation. These resources are sufficient for compensating the guaranteed amount of deposits of BS and B.C."UNIBANK" S.A. and compensate only 34.2% of guaranteed deposits of BEM.

In conclusion, the current institutional framework for financial stability of the banking system in the Republic of Moldova has serious *shortcomings*:

- the lack of the *objective* of maintaining financial stability,

- the lack of a *macroprudential surveillance* and of a periodic *assessment of risk* to financial stability,

- the lack of the *accountability* of the NBM that are responsible for banking supervision,

- the lack of a clear *institutional framework for crisis management and resolution*, an appropriate level of systemic protection.

5. Conclusions

Recent events that took place within the Moldovan banking system suggest an intense need for strengthening financial stability framework in the country through three main *actions*:

a)redefining the central bank's role,
b)strengthening the crisis management, and
c)strengthening the deposit insurance system.

In order to strengthen the current institutional framework for financial stability in the Republic of Moldova the following policy recommendations should be put in place:

1. Redefining the NBM role. Undertaking by NBM the task of safeguarding financial stability of the sector which it oversees. It is necessary to make relevant amendments to the Law on NBM (Article 5), by stipulating that "the licensing, supervision and regulation of financial institutions are provided for promoting the soundness of the banking system". This amendment will increase the accountability of NBM towards this objective.
2. NBM should pay attention to macroprudential surveillance (though elaborating and publishing Financial Stability Reports) in order to identify systemic indicators and trends that usually provide an early warning of banking fragility.
3. Raising the accountability of NBM through a transparent framework for the discharge of its duties. Although there are stipulated the basic tasks of the NBM in the Law on NBM (Article 5), there are no statements about the accountability of the NBM. The accountability is the degree to which institutions are responsible for their own actions, decisions and performances and are required to explain and justify them to market participants and to the institutions that delegated authority to them.
4. Developing a comprehensive financial crisis resolution contingency plan, and identify necessary amendments to the legislation, by making from the National Commission for Financial Stability a functional body.
5. Enhancing funding of the DGFBS by developing a target fund methodology; amending legislation to provide a line-of-credit to the DGFBS from the Ministry of Finance; and amending the Law on DGFBS Law and the Law on NBM to include the NBM as an additional source of back-up funding for the DGFBS. Also in order to assure the confidence in the banking system should be increased the limit of the guaranteed amount of deposits through increasing the annual contribution of banks to the DGFBS.

[39] Law on guaranteeing deposits of individuals in the banking system No. 575-XV of 26.12.2003

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MODELLING APPROACHES TO ASSESS THE EFFECTIVENESS OF MACRO-PRUDENTIAL POLICY

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Abstract

In this paper was approached the problem of the effectiveness of the macro-prudential policy, which became an actual subject in scientific literature. We made a literature review of the applied methods to diagnose the effectiveness of the macro-prudential policy toolkit; explored the possible methodologies and frameworks which can be used to investigate the effectiveness of the implemented macro-prudential policies (Alpanda et al. (2014), CGFS (2012)); showed their advantages and drawbacks and proposed an empirical method. By this paper we aimed to develop a proper framework for policy-makers to follow for sustainable implementation of the macro-prudential policy and assessment of its effectiveness.

Keywords: macro-prudential policy, effectiveness, DSGE model, emprical models

JEL classification: E5, G21, G28

1. Introduction

The crisis has demonstrated the need to renew our approach to financial system regulation and notably to complement it with a macro-prudential perspective. There is no single definition of what constitutes “macro-prudential” policy. There is, however, some consensus over its broad outlines.

First, it involves adding a macroeconomic perspective to the supervision of the financial system, which up till now has only really been addressed from a “micro” standpoint. As the crisis has shown, financial stability does not depend solely on the soundness of the individual components that make up the financial system; it also depends on complex interactions and interdependencies between these components. Moreover, the term “macro” refers to the interactions between the real world and the financial world, to the extent that a risk only becomes “systemic” once the imbalances or shocks affecting the financial system pose a significant threat to economic activity.

The second characteristic of macro-prudential policy is that it is preventive. Its aim is precisely to prevent the formation of financial imbalances, pro-cyclical phenomena or systemic risks by limiting excessive growth in credit and in economic agents’ debt levels, and increasing the shock-absorbing capacity of financial institutions or structures ex ante. Therefore, macro-prudential policy is not designed to manage financial crises directly once they have erupted, but rather to prevent them from happening in the first place. The implementation of macro-prudential policy poses a number of major challenges, particularly as many countries have only just put in place the necessary operational frameworks. Experience and analysis have shown that the successful implementation of macro-prudential policy depends on three key factors: the governance of that policy; the identification of market failures and the; selection of tools to combat them; a proper understanding of the channels of transmission and of the way these tools interact with other economic policies, notably monetary, fiscal and micro-prudential policies.

In recent years, many central banks mainly made use of the macro-prudential policy toolkit to address the financial stability issues. But besides the fact that the macro-prudential policy framework become relative popular, the evidence about the effectiveness of macro-prudential policy and its transmission mechanism is still limited. In this study we aim to explore the most used

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methods to assess the effectives of the macro-prudential policies and determine the transmission mechanism of its toolkit.

The paper was structured as follows: in the second section we made a literature review of the applied methods to diagnose the effectiveness of the macro-prudential policy toolkit. In the third section were explored the possible methodologies and frameworks which can be used to investigate the effectiveness of the implemented macro-prudential policies, were showed their advantages and drawbacks and was proposed an empirical method to follow for policy makers, the last section conclude.

2. Literature review

Besides the fact that the macro-prudential policy framework become relative popular, the evidence about the effectiveness of macro-prudential policy and its transmission mechanism is still limited. Most studies performed on this subject are cross-country analyses which were focused on the cyclical aspects on the credit and housing markets or on the systemic risk issues.

Many empirical works relied on the Lim et al. (2011) study, which found that several different macro-prudential tools reduce the procyclicality of credit growth by reducing the correlation between credit growth and GDP growth. Cerutti et al. (2015) showed that the usage of the macro-prudential policy instruments is generally associated with lower growth in credit and their effects are less in financially more developed and open economies. Also, they found that that macro-prudential policies can help manage financial cycles, but they work less well in busts.

Dell'Ariccia et al. (2012) also found that macro-prodential policies can reduce the incidence of credit booms and temperate the negative effects of the bubbles. They stressed the fact that macro-prudential policies reduce the risk of bust, reducing by that simultaneously how the rest of economy is affected by troubles in the financial system.

A large research work on the macro-prudential policy use and effectives was performed by the International Monetary Fund. The IMF defined the macro-prudential policy framework and categorisized its toolkit. (IMF, 2011a); proposed indicators to measure the systemic risk (IMF, 2011b). Besides the IMF investigated and the externalities effects, such as evasion effects and spillovers to other countries, urginf the policy-makers to pay more attention to the multilateral effects of the macro-prudential policies. (IMF, 2011c)

As we showed the most worked performed by now, anayzed the effects of the macro-prudential policy instruments on various segmentst of the financial sector and found them effective in reducing the effects of the systemic risk. But, unfortunatelly were neglected the externnalities and the aggregate outcome of use of the macro-prudential policy toolkit.

Beirne and Friedrich (2014) went more specific. They assessed thee effectiveness and associated externaliities that arisee when macro-prudential policies are used to manage international capital flows and shwed that the structure of the domestic banking system matters for the effectiveness of these policies. They found that a high share of non-resident bank loans in the MPP-implementing country reduces the domestic effectiveness of most MPPs, while a high return on assets in the domestic banking system has the opposite effect.

The most papers which addressed the issue of effectiveness of the macro-prudential policies had a theoretical or an empirical nature.

Some studies focused on the theretical framework explored the welfare-enhancing side of the macro-prudential policies, in the context of existance of aggregate external financing shock. By introducing financial frictions, was showed that different agents oof the financial sector can boost the systemic risk, by undertaking large exposures. Were investigated the financial frictions such as limited commitment in financial contracts (Lorenzoni, 2008), limited access of banks to productive capital in times of crisis (Federic, 2011) or coollateral constraints. (Korinek, 2010)

Other theoretical researches explored the implications of the Dynamic Stochastic General Equilibrium (DSGE) framework.

Bianchi (2011) performed a quantitative analysis of the systemic credit externality ina two-sector DGSE-model of a small open economy. He showed that raising the cost of borrowing during tranquil times restores constrained efficiency and significantly reduces the incidence and severity of financial crises

The empirical literature on the macro-prodential policy framework highliteghted a significant impact on the systemic risk.

Lim et al. (2011) examined the effectiveness of macro-prudential policy instruments by performing an analysis over a group of 49 countries and showed that many of the most frequently used instruments are effective in reducing pro-cyclicality, but the effectiveness is sensitive to the type of shock facing the financial sector. Based on their findings, were identified conditions under which macroprudential policy is most likely to be effective, as well as conditions under which it may have little impact.

Out paper is intented to be a small contribution to the existing literature on the proper implementation of the macro-prudential policy framework. We aim to propose a theoretical framework for proper introducing and assessing macro-prudential policy toolkit.

3. Testting the effectiveness of the macro-prudential policies. Understanding the interaction between the financial system and the macroeconomy

The most crucial point in the process of development of the macro-prudential policy framework is understanding of the interaction between the financial system and the macroeconomy and proper assessment of the effectiveness of the developed macro-prudential policy toolkit.

In scientific literature does not exist a single approach to investigate the transmission mechanism and respectively, effectiveness of the macro-prudential policies in EMEs countries. Giving the fact that each approach carries a series of drawbacks, in order to study the effectiveness of the macro-prudential policies in CIS countries is advisable to apply a set of different approaches, such as: analysis of hystorical experiences, theoretical approaches (DGSE model), empirical analysis and some alternative methods proposed by the Committee on the Global Financial System. Each approach allow not only to derive the effectiveness of the macro-prudential policy, but also its interaction with monetary policy and potential implications.

I. General equilibrium approaches

The DSGE models augmented with financial frictions, which build on the financial accelerator mechanism of Bernanke et al. (1999), have the potential to investigate the effects of macro-prudential tools that focus on the time dimension of systemic risk. Their general equilibrium nature makes them attractive for policy analysis.

The general equilibrium approaches used for assessment of the effectiveness of the macro-prudential policies can be grouped into three cathegories of models: banking models, dynamic stochastic general equilibrium macro model (DSGE) anf infinite horizon general equilibrium macro model. (Galati, Moessner, 2014)

The main advantage of the *banking models* is the possibility to analyze risk-taking behavior of heterogeneous agents in an economy that is vulnerable to systemic risk. They capture the cross-sectional dimension of the systemic risk by exploring the interrlinkages between assets and contracts and assuming that the financial shock can propagate through the financial system through informational and balance sheet linkages. (Perotti, Suarez, 2011)

Dynamic stochastic general equilibrium macro model (DSGE) is the most comprehensve mdel used by central banks to assess the effectiveness of the macro-prudential policy. The main contribution of this model lies in explaining the interrlinkages between real and financial factors and how these interractions can contribute to the systemic risk amplification.

We considered that a representative DSGE model, which could be used for small-open economies is the approach, developed by Alpanda et al. (2014). The model incorporates four cathegories of agents: savers, bank who intermediate between savers and borrowers, lenders from private sector (households and firms).

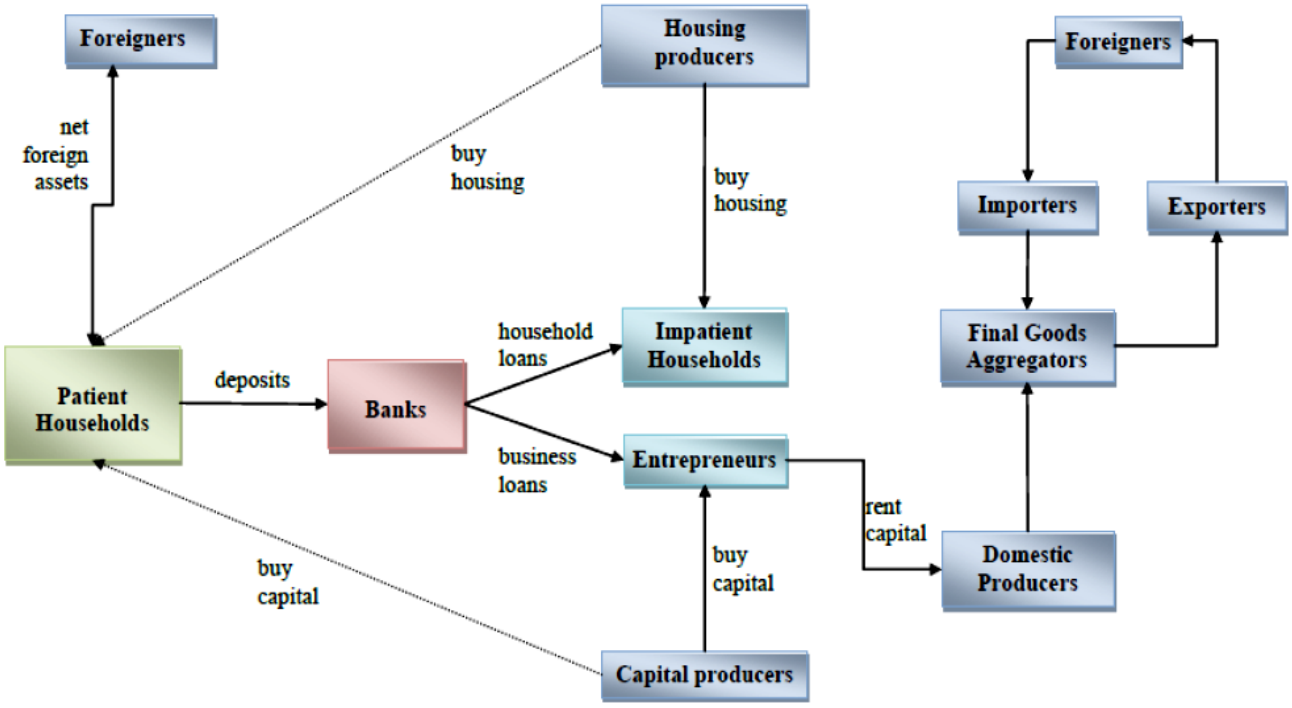

Fig.1. *Model agents and key flows of funds, inputs and goods*

Source: Alpanda, S; Cateau, G.; Meh, C. (2014) A policy model to analyze macroprudential regulations and monetary policy, BIS Working Paper, no. 461, p. 42.

The model is structured in block equations and is featured for monetary, fiscal and macro-prudential policy. The rationale behind is the following: on the production side the domestic producers lend capital and labor to produce domestic goods, which aggregated with imported goods end in consumption, business investments, residential investment, government expenditure and exports. To capture the excgange rate pass-through were introduced the importers and exporters as separate agents.

Besides, uncontestable advantages, the DGSE approaches have two important drawbacks to consider: these models neglect the role of time and business cycle, which makes it more difficult to study macroprudential tools geared towards the procyclicality of the financial system. Second, they are mostly partial equilibrium models, and recent research suggests that the effect of macroprudential tools is different in a general equilibrium setting (Al-Darwish et al., 2011; Galati, Moessner, 2014)

The strenght points of the DSGE models are: modelling in a unified framework the interrelations between the balence sheets of the households, companies and banks; take account for the risk-taking channel and the long-term debt channel. Besides they provides a framework for a more deeper investigation of the transmission mechanism of the macro-prudential policy instruments, potential iinterrelations with monetary policy. Moreover, they are particularly suitable for simulations, which make them useful to study the impact of new policy instruments, and investigation of the effectiveness of various policies in simultneously achieving macroeconomic and financial stability.

In order to highlight the main transmission channels of the macro-prudential policy tools and interaction with monetary policy, many emerging countries apply the simplified version of the DSGE modesl, mainyl they resoort on the Quarterly Projection model, applied first by the Canadian central bank and adjusted with financial frictions. We consider that is more appropriate not to use a general version of the model, but to adapt its equation by determing the speficit structure of the model by applying the panel data method for a group of countries with the same conditions as the considered economy and then to adapt the estimated model to the specific conditions of each country. The main econometric methods used for analysis are estimation and calibration techniques.

Infinite horizon macroeconomic DSGE models are attractive for policy analysis, due to the fact that explore the time dimension of the systemic risk and allow simulations in order to investigate the

effects of the macro-prudential policy instruments. Compared to standard DSGE models, they mare a more elaborate amplification mechanism and impliy multiple equilibria, makins them suitable for indeep investigation of the effectiveness of the macro-prudential policies which can be used in order to reduce the negative effects of the crisis. (Boissay et al., 2013) But, the important drawbacks from which suffered these models are: exlude the possibility of defaults, do not take account for effects of changes in regulations

II. Alternative approaches (stylized maps)

In recent years, several studies have followed an alternative, narrative approach to studying the transmission mechanism and effectiveness of macro-prudential tools.

An influential report elaborated by the CGFS (2012) provides a conceptual framework to ilusstrate how the effectiveness of the macro-prudential policy instruments can be judged in practice. (CGFS, 2012)

CGFS framework comprise a stylized presentations, named „transmission maps", which can be used as practical tool to study how the changes in individual instruments of macro-prudential policy anihilate the identified vulnerabilities, and how they interact with other policies. The approach allow to study the impact of instruments on the credit cycle in different pahses and the resilience of the financial sector to the stress tests. The tools used are capital or provisioning requirements, sectoral capital requirements, liquidity requirements and asset-side instruments

One of these transmission maps is presented in the figure below. As we can observe, this map is a narrative approach and provides only a rationale for judgement for policy-makers, related to the transmission mechanism and effectiveness of macro-prudential policy. Investigation econometric methods used are: narrative analysis, descriptive statistics, correlations.

This type of analyze is used to annihilate the potential drawbacks of the general equilibrium and empirical models. It provides several important results. First, in terms of monitoring the build-up of financial imbalances and predicting crisis, CGFS (2012a) documents how the credit-to-GDP gap, the debt service ratio, the growth in residential property prices and their gap turn out to have been useful indicators in signaling past crises. They are more recomended for emerging economies with low quality of statistica data. They offer a comprehensive scheme for judgement and is simple to use. Beisdes, are representative and are capable to capture the most important channel through which the policy makers may attain their objectives, due to the simplicity of the interlinkages on the financial market.

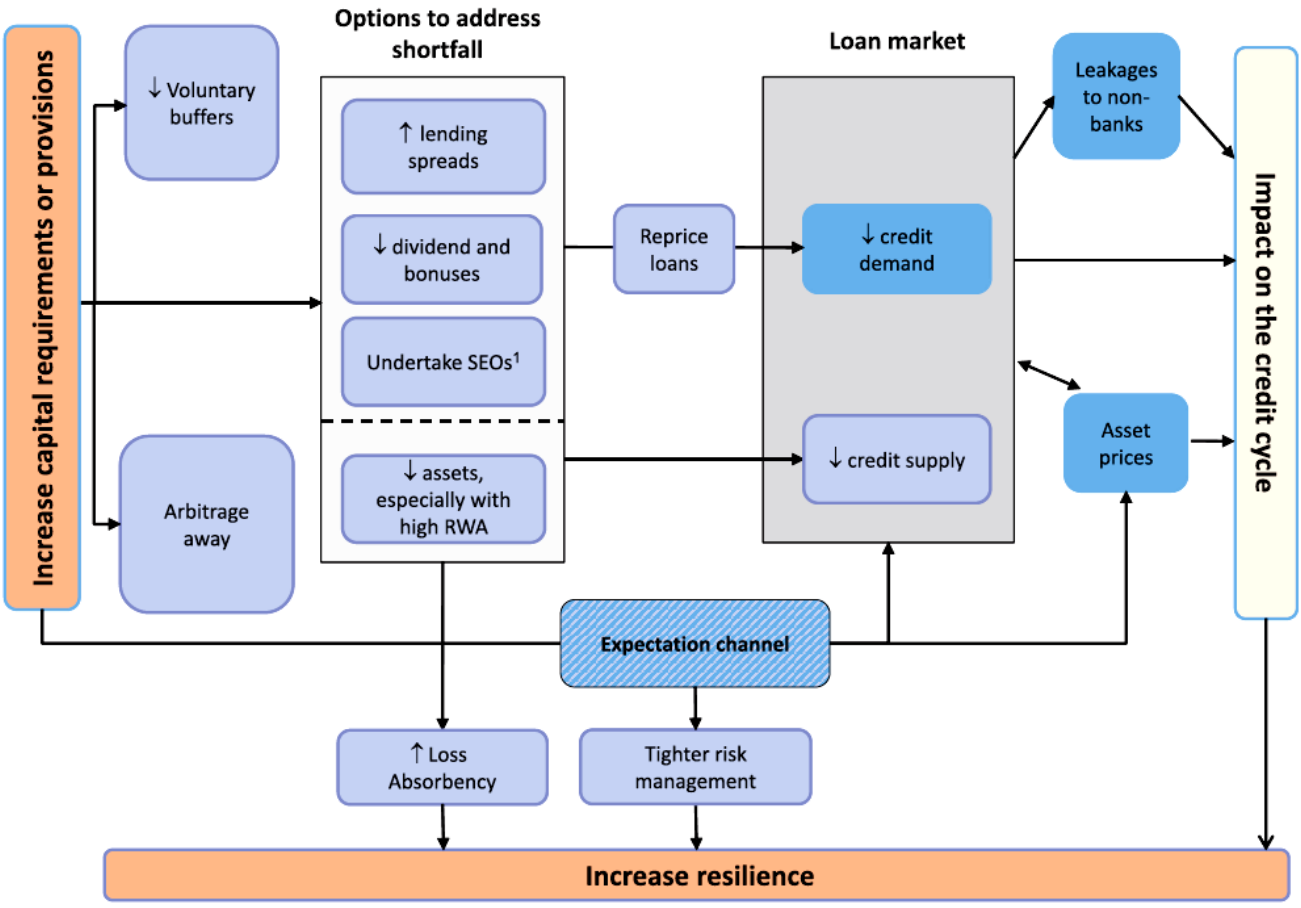

Fig. 2. *Transmission map of raising capital or provisioning requirements*

Source: Committee on the Global Financial System (2012) Operationalising the selection and application of macroprudential instruments, CGFS Papers, no. 48, p. 20

But besides the listed advantages, the alternative approaches have also many important drawbacks. First, the effects of individual instruments are often uncertain. The „transmission map" may describe a limited number of channels through which a macro-prudential policy instrument can work. Theremore, some instrument may have only temporary effects, or may be be determined by other exogeneous factors, which can be captured by the „transmission map". Second, these approaches are not supported by the empirical evidence and the results depends on the expert experience and judgement.

III. Empirical models

In some cases empirical analysis does not provide reliable results. This can be explained by the low quality of statistical data, lack of macroeconomic models to capture the mechanics of economy and financial system and their interlinkages and so on.

For policy-makers, the main problem in empirical analysis is to identify the causality and impact of macro-prudential policy on the financial and economic fundamentals. The results provided by the empirical tests can be very ambiguous. As a consequence, frequently are used several approaches at once, in order to deal with this issue. Some of these approaches are:

- event studies; assessments of authorities or outside observers;

- reduced-form regression analysis, typically conducted using cross-country panel regressions;

- macro stress tests;

- counterfactual analysis;

- analysis based on micro data.

As a econometric methods, policy-makers resort mainly on panel data methods. Panel data are used to overcame the problem with the quality and lack of the statistical data and better capture the impact of macro-prudential policy instruments. They are applied for specific group of countries.

Below is proposed a model, suitable for assessment of the macro-prudential policy effectiveness, from our point of view. First is presented the theoretical model, then a econometric base of the recommended approach.

a) Theoretical model

This section will lay out the empirical model used in the analysis and presents estimates of the policies' effects on total domestic credit.

The empirical reduced-form regression model used in the analysis is as follows:

$$C_{t,t} = \eta_t + \rho C_{t,t-1} + \beta VIX_t + \sum_{k=1}^{p} \theta_k X_{t,t-k} + \delta MAPP_{t,t-1} + \epsilon_{t,t} \quad (1)$$

As depended variables we recommend the VIX index (the global risk aversion variable), X – macroeconomic stance index, represented by a vector of two variables – real GDP growth and rate of change of the monetary policy nominal interest rate, and MAPP – macro-prudential policy index, constructed as a sum of individual instruments of macro-prudential policy, weighted equally: loan-to-valut (LTV), debt-to-income ratio (DTI), limits on credit growth (DC), limits on foreign lending (FC), reserve requirements (RR), dynamic provisioning (DP), countercyclical requirements (CTC), limits on profit redistribution (PRD).

We chose to use cumulative measures in the panel data analysis because macroprudential measures can affect credit and house price growth not just in the quarter of implementation but in subsequent quarters as well. Some of these policies may be delayed in their effect: though we record the date the measure was put in place, it could be that these measures do not bind until years later. For all these reasons we choose to use the country's overall macroprudential stance as our variable of interest.

η_i is a fixed effect, i denotes countries, t indicates time period. The purpose of introducing country specific dummies, which correspond to the η_i is a fixed effect, is to estimate the country specific intercept term for each country in the sample.

For this type of analysis is recommended to apply the dynamic panel data regression model with country fixed effects.

b) Econometric model

The prototypical equation for the fixed effect model with strictly exogenous regressors to include lags of the dependent variable, allowing for error serial correlation of unknown form, takes the form:

$$y_{it} = \alpha y_{i(t-1)} + x'_{it}\beta + \eta_i + v_{it} \quad (2)$$

together with the assumption

$$E\left(v_{it} \mid x_{i1}, ..., x_{iT}, \eta_i\right) = 0 \ \ (t = 1, ..., T) \quad (3)$$

An equation of this type might also contain lags of x and/or additional lags of y, but (1) captures the essential feature of the model that we wish to discuss. Namely, a dynamic effect of x on y for which the speed of adjustment is governed by the coefficient of lagged y.

Assumption (2) implies that x is uncorrelated to past, present and future values of v, and hence it is a strictly exogenous variable. It does not rule out correlation between x and the individual effect η. Lagged y will be correlated by construction with η and with lagged v, but it may also be correlated with contemporaneous v if v is serially correlated, which is not ruled out by (2). Thus, lagged y is effectively an endogenous explanatory variable in equation (1) with respect to both η and v. Examples include partial adjustment models of firm investment or labour demand, and household

consumption or labour supply models with habits. In these applications the coefficient α captures the magnitude of adjustment costs or the extent of habits. It therefore has a structural significance. Moreover, there are often reasons to expect serial correlation in the transitory errors v of the economic model. In those cases lagged y must be treated as an endogenous explanatory variable.

Assumption (2) implies that for all t and s

$$E\left[x_{is}\left(\Delta y_{it}-\alpha\Delta y_{i(t-1)}-\Delta x_{it}'\beta\right)\right]=0 \tag{4}$$

Thus, the model generates internal moment conditions that, subject to a rank condition, will ensure identification in spite of serial correlation of unspecified form and the endogeneity of lagged y. Essentially, we are exploiting the strict exogeneity of x in order to use lags and leads of x that do not have a direct effect on Δyit as instruments for Δyi(t−1).

For example, if the model contains the contemporaneous and first lag of a scalar variable x and T = 3, we have three instruments x1, x2 and x3 for the single equation in first differences

$$y_3-y_2=\alpha\left(y_2-y_1\right)+\beta_0\left(x_3-x_2\right)+\beta_1\left(x_2-x_1\right)+\left(v_3-v_2\right) \tag{5}$$

so that the coefficients α, β0, β1 are potentially just-identifiable from the moment conditions E (xisΔvi3) = 0, (s = 1, 2, 3).

The models in this section should not be regarded as an extension of the pure autoregressive model. The purpose of AR models is to capture time series dependence, so that it is natural to start with serially uncorrelated errors. Here, however, lagged y appears in a structural role, and we consider models where its effect is identified regardless of serial correlation.

4. Conclusions

The most crucial point in the process of development of the macro-prudential policy framework is understanding of the interaction between the financial system and the macroeconomy and proper assessment of the effectiveness of the developed macro-prudential policy toolkit.

In scientific literature does not exist a single approach to investigate the transmission mechanism and respectively, effectiveness of the macro-prudential policies in EMEs countries. In this paper we aimed to develop a comprehensive framework for policy-makers, which would comprise the most representative approaches used to diagnose the effectiveness of the macro-prudential policy. First we presented the core structure of the DSGE model and showed the potential drawbacks which can be faced, when highlighted how the alternative methods can be used to annihilate these drawbacks. It was showed that, even that the alternative approaches are simpler and are more narrative, combined with DSGE model can be obtained a better rationale for assessment. Finally, we propose an empirical model to follow. We presented a general structure of the model, namely its core equation and main variables which can be adapted further giving the specific features of each economy.

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CONTEMPORARY TENDENCIES IN THE DEVELOPMENT OF THE FINANCIAL SECTOR IN BULGARIA IN THE CONTEXT OF THE REGULATIVE CHANGES IN THE EU

Tatiana HOUBENOVA-DELISIVKOVA[43]

Abstract

The development of the financial sector in Bulgaria in the period (2007-2014) has been influenced by the slowdown of economic growth and the transmission of the impact of the Global and European sovereign debt crisis. The contraction of credit activities of the banks as a main financial intermediary has reflected the extension of the economic stagnation and has deepened the incompatibility between the savings and reduced investments with the negative macroeconomic follow-up effects as crisis in the real sector, unemployment and the stagnation of incomes. The role of the financial sector in the Bulgarian economy remains high and the ongoing EU and especially the EMU reforms for guaranteeing better stability of the financial sector present a new set of challenges to the banks and investment intermediaries to function in favor of stimulating the economic growth. The reforms in the financial sector in the EU present a challenge and a chance for Bulgaria to adjust to the requirements for the EMU entry. The reforms undertaken in Bulgaria's financial sector are on the agenda also with regard to the preparation to join the EMU.

Keywords: financial crisis, credit crunch, banking activities, investment intermediaries, financial stability, EU reforms in the financial sector.

JEL Classification: G12,G28,G32,G33.

Introduction

The financial sector of Bulgaria has undergone important changes since the accession to the EU in 2007. In compliance with the EU law for the banking and nonbanking activities regulative reforms have been successfully introduced to implement the Single market for the financial services and the accession to the European financial space.

The financial sector's activities have been important drivers' of economic growth and play important role for Bulgaria as a member state of the EU. There are economic reasons to deepen the financial integration of Bulgaria at present on the basis of the level of the achieved forms of penetration of the investments from the EU in the financial sector. The Bulgarian banking system is characterised by the predominance of foreign banks which are subsidiaries of EU banking groups.Their market share is 73 percent while less than a quarter of the market share (23 percent) is held by domestic banks. Approximately a quarter of the market share, 24 percent, is held by Greek-owned subsidiary banks. Altogether there are 28 banks in Bulgaria (excluding one recently failed bank), of which 6 are branches. Banking establishments from outside of the EU represent less than 1.5 percent of the banking system.

Taking into consideration the present situation with the reforms in the EMU (Economic and Monetary Union) of the EU and the road map for building the Banking and Capital Union we consider the issues of the financial sector's development in Bulgaria closely related to the progress of undergoing reforms. There are two reasons to consider the issues of the financial sector's development of Bulgaria in the framework of the ongoing reforms in the EMU.

On one hand, the preparation for the EMU for Bulgaria has been inseparable part of the engagements of joining the EU in 2007. The compliance to the EMU new requirements is the framework to which Bulgaria has to adjust its own financial sector. In the pre-accession period until 2007 the common view has prevailed among scholars and politicians in Bulgaria that the time of the adoption of the euro should be as soon as possible after the date of the country's accession to the European Union, namely in the second half of 2009 or on 1 January 2010 at the latest. This view

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was completely consistent with the common position of the Bulgarian Council of Ministers and the Bulgarian National Bank (BNB) as stated officially on November 25 of 2004.

But nowadays this priority has to be considered with regard to the EU strategy of deepening of the EMU as a Monetary, Banking and Capital Union. There is a need to conceive that the EMU has acquired new institutional and regulatory features that raise the requirements for the preparation to enter and adjust to it as a regular member country of the EU. The hypothesis is discussed that the delay of Bulgaria's joining the EMU may present a challenge of higher costs of compliance to the more advanced form of "differentiated integration" of EMU in the EU and its institutional architecture.44

The paper involves the discussion of three main aspects as follows: 1) the impact of the macroeconomic performance of Bulgaria on the activities of the financial sector; 2) discussion of the present state of the financial sector in Bulgaria; 3) the financial sector's regulatory reforms and the prospects for the EMU. Conclusions are summarized for the EMU's deepening as a challenge and opportunity for further enlargement.

1. The Macroeconomic Performance of Bulgaria in 2007-2015 and its impact on the financial sector

During the last decade, Bulgaria has achieved macroeconomic stability and positive GDP growth but under the impact of the Global financial crisis and the European sovereign crisis the economic performance has worsened since 2009. The financial sector has played an important role to mobilise and channel properly the credit resources and the non-financial firm debt and household debts have been useful drivers of economic growth until 2009.

The financial intermediaries have made possible the growth of investments and the achievement of higher overall rates of growth by that time. Since then the sharp reduction of economic growth has made private deleveraging a barrier which has been more difficult to overcome due to the deterioration of the international and internal business environment and the low demand of new credits. The Bulgarian economy has been hit by the severity of the European sovereign crisis and recession in the Euro area which has been followed by a subsequently weak recovery up to mid 2015.

The economic growth for the period (2000-2008) has been kept on stable upward track record due to the increased aggregate supply and consumption, fiscal consolidation, the foreign capital inflows as a substantially increased external source of finance and the maintenance of the monetary discipline through the sustainability of the Currency Board since 1997. GDP growth rate for the period (2005-2008) has averaged annually 6.4%. Compared to other EU member states Bulgaria has experienced since the start of the new millennium high rates of economic growth which have raised the expectations as well as doubts for the continuity of the "catch up" type of growth after joining the EU (Angelov, 2006).

The growth of domestic and foreign capital investments has been concentrated predominantly in construction, real estate, tourism and services which contributed to overheating the economy. During the period 2005-2008, Bulgaria's GDP grew by a relatively rapid pace but since 2009, the GDP contracted by 5% and a slowdown of economic growth followed (Figure 1). The financial sector and foreign investments have been strong drivers of economic growth during this period.

The foreign direct investments from the EU have presented the biggest share of the total inflow of FDU in Bulgaria traditionally but especially since the end of the 90s when the privatization began. The abrupt fall of FDI as a result of the Global and European sovereign crisis in the period 2009-2012 has had a very negative effect on the Bulgarian economy and is indicative of the complementarities that have already being created with partners from the EU (Fig.1).

[44] As stated in the Article 1(3) Treaty of European union (TEU) and the Treaty on the Functioning of the European Union within or outside the Treaties of the EU in the field of European economic and monetary policy the differentiated integration is the cooperation of some but not all EU member states.

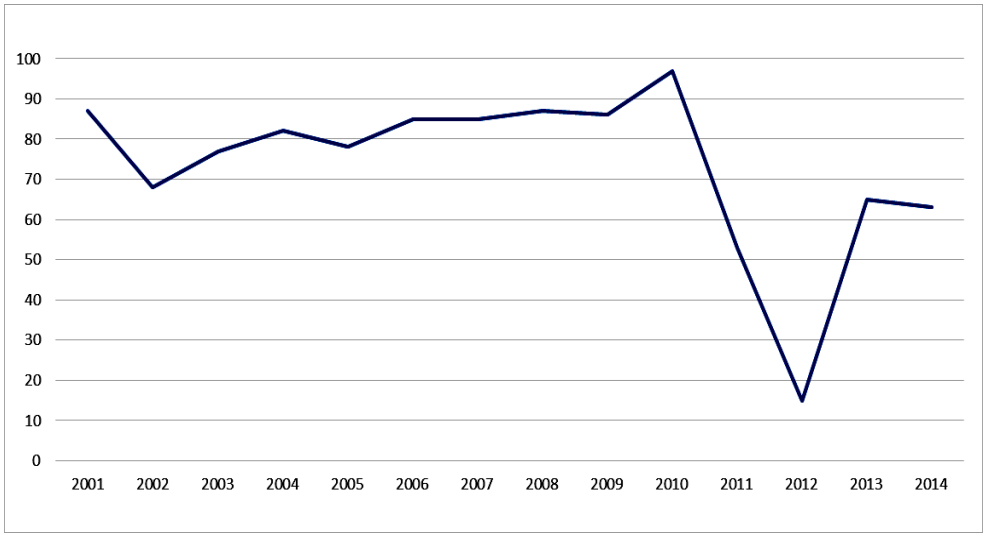


Fig.1. *FDI from the EU as % from the total FDI in Bulgaria (flow of net transactions) in %*

Source: Eurostat

Since 2010 began a gradual recovery of the Bulgarian economy, but at a very slow pace. In 2010, growth was only 0.7%, in 2011 rose to 2% and in 2012 was only 0.2%. In 2013 and 2014 the economic growth remained rather modest at the rate respectively of 1.1 and 1.7%. For achieving the pre-crisis level of growth it has taken five years. In 2015 the rate of growth has increased to 2.9% and higher rate of about 3% has been forecasted for 2016.

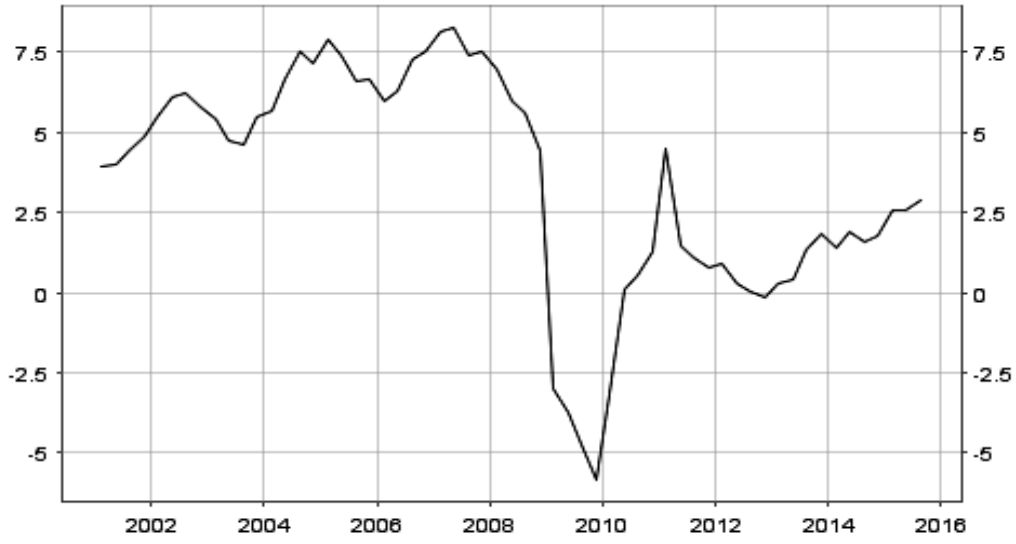


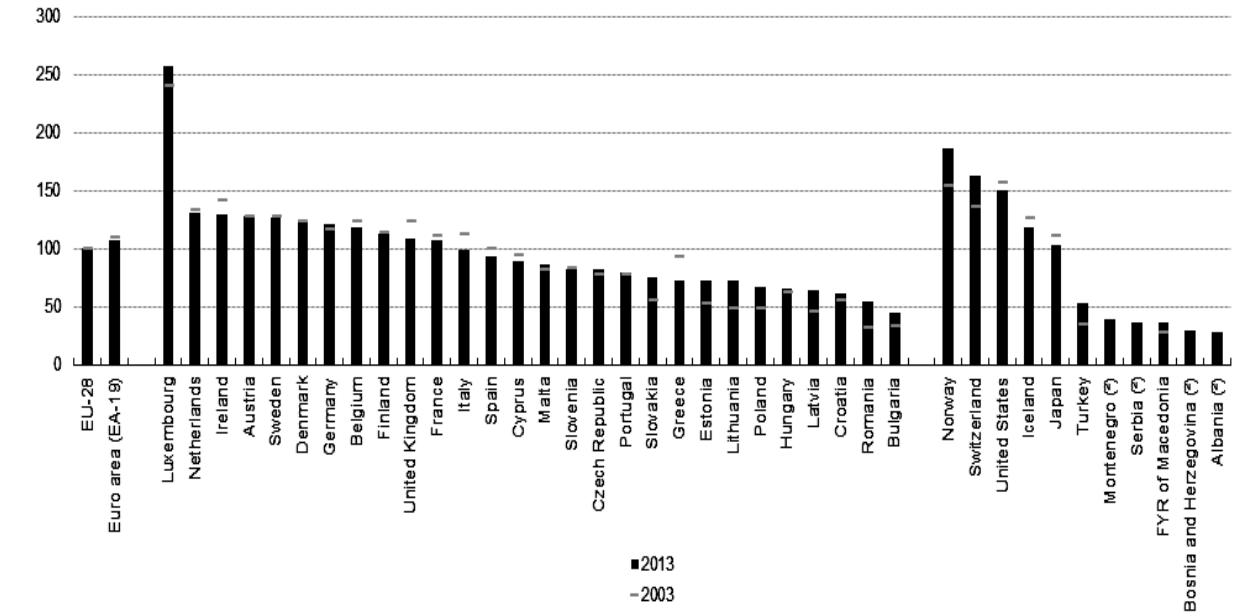
Fig.2. *The Annual Rate of Growth of the GDP of Bulgaria for 2002 -2014 (market prices, %)*

Source: European Commission (Eurostat) National accounts of Bulgaria.

Macroeconomic performance has allowed to maintain stability but the rate of growth has remained low in recent years. The unsatisfactory growth record has been accornpanied by relatively modest fiscal deficits, low inflation and a stable currency. Growth has been deprived of new capital inflows from abroad as direct and portfolio investments have fallen considerably as result of the Global and the European sovereign crisis. The economic growth has become largely dependent on domestic factors and only to some extent driven mainly by growth in services and manufacturing, the latter aided by an expansion in exports of labor-intensive goods.

The need of raising growth is considered a necessary prerequisite to diminish the gap between the GDP per capita of Bulgaria and the average GDP per capita of EU-28. Bulgaria records the lowest level of this indicator among the EU Member States as its GDP per capita amounts to 53% below the EU average. Besides Bulgaria has achieved a very small increase of the GDP per capita from 2003 to 2013 compared to other EU countries. This trend has inluenced negatively the aggregate

demand. This indicator reflects the need of structural policies to raise the incomes' level and national wealthfare by economic growth that has to allow for better real convergence with the EMU (Fig. 3).



(') Break in series.
(*) 2003: not available.
Source: Eurostat (online data code: tec00114)

Fig.3. *EU Member States:GDP per capita at current market prices, 2003 and 2013 (EU-28 = 100; based on PPS per inhabitant)*

The European commitments of Bulgaria for macroeconomic convergence with EMU are an integral part of the Accession Treaty to the EU. With the efforts for the implementation of Maastricht criteria for EMU Bulgaria has achieve progress towards macroeconomic nominal convergence (criterion on price stability, sound public finances, exchange rate, short-term and long-term interest rates).

The price stability has been a target of the Bulgarian Government and central bank's policies since the pre-accession period. For the period (2004-2008) the price criterion was not accomplished as the inflation was higher than the referent value threshold. The structural readjustment and credit expansion related to the higher rates of growth caused higher rates of inflation in the period (2004-08). The economic decline has caused a reversal of this trend since 2009 onwards by the recorded relatively stable process of deflation (Fig.4).

The domestic factors contributed to higher average inflation until mid2009 included: adjustments in administratively regulated prices, the harmonisation of excise duties with EU levels by increasing them in several stages upon and after joining the EU, oligopolistic type of the markets for a number of goods and services etc. The group of goods and services with administratively controlled prices had a positive contribution to overall annual inflation in contrary to the deflationary trends.

The external factors play a role in the domestic price formation due to the high openness of the Bulgarian economy and the high degree of import dependencies that exercise relatively big influence of the import prices. These prices rose steeply in 2004-2008 but recorded a steep annual decrease of 14% in 2009. Energy and food prices have been a major component of imported inflation especially if it is taken in consideration that these commodities have large share of the Bulgarian basket of the Harmonised index of Consumer Prices (HICP).

Their influence on the price level in Bulgaria is big as after the fall of the international prices of oil, energy resources and foods has been reflected in the deflationary trends in Bulgaria. After the average monthly inflation became negative in August 2013, the decline in consumer prices on an annual basis accelerated in 2014, and the decrease in HICP at the year-end amounted to 2%. The

average annual inflation rate for 2013 was also negative at -1.6. The sharp fall in inflation in 2009 was partly a result of lower commodity prices and the contraction in economic activity. In 2010 and 2011 the inflation gradually picked up again, to 3 and 3.4% respectively, largely reflecting a increase of the commodity prices and increases in the excise duty on tobacco.

foods, etc. and the deflation trends from abroad further decline in the rate of inflation. The deflation continued in 2015 creating risks of deepening of the deflationary trends (Fig. 4).

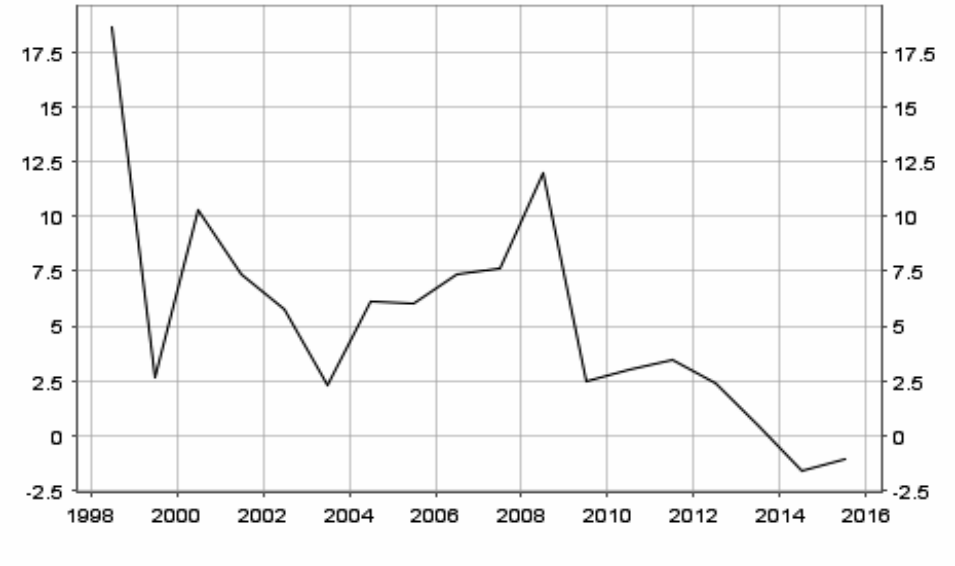


Fig.4. *Inflation in Bulgaria: Overall index HICP*

Source: Eurostat, 2015 (Bulgaria – HICP – Overall index, Annual rate of change, Eurostat, Neither seasonally nor working day adjusted, UnitPercentage).

The historically low level of inflation (within the range of -0.8 to 0.9%) in 2013 has been considered in the Convergence Report of 2014 as building risks of increasing inflation in Bulgaria (ECB, 2014). Such a forecast has not come true in 2015 least but not last because of the ongoing fall of the international prices of food, oil and energy resources. During 2014 a stable process of deflation was observed as half of the dynamics of consumer prices went in decline.

After inflation became negative in August 2013, the decline in consumer prices on an annual basis accelerated in 2014, and the decrease in HICP at the year-end amounted to 2%. The average annual inflation rate for 2014 was also negative at -1.6%. The annual average inflation, measured by CPI, in the last 12 months (January - December 2015) compared to the previous 12 months (January - December 2014) was -0.1%. The deflation continued in 2015 and at annual basis in December 2015 compared to December 2014 was -0.9 %. The official forecast in the Convergence Program of Bulgaria for the period 2015-2018 (MoF,2015) previews negative inflation trends to be replaced by a rather moderate rate of inflation for 2016 (HICP being 1,6% to 2% on annual basis)(MoF, 2015). The main risks of further deflationary trends remain due to the uncertainty of the medium term trends of international prices of crude oil, gas, services and foods. At the same time, a delayed recovery of domestic demand may alsol limit increases in prices of goods and services.Evidently the impact on Bulgaria of the weak recovery in the Euroarea and the EU has continued and creates concerns for the low demand of new credits due to the fall of aggregate demand.

But as regards the adoption of the euro the problem of the pro-inflationary factors and their evaluation is an important issue of the forecast of medium and long term inflation trends and the ongoing readjustment of the Bulgarian economy to the global trends. Many new EMU countries have experienced a rise of inflation after joining the EMU.In a monetary union, there are a number of factors that exercise upward pressures on inflation and due to this inflation may become self-sustained and give rise to an abrupt adjustment. Since the nominal interest rate is fixed at the union level, any shock bringing inflation above the union average will reduce the real interest rate and fuel further inflationary pressures, in a self-reinforcing mechanism for instance by stimulating credit expansion.

However, also being out of the EMU has its risk of adverse impact of the pro-inflationary trends through the channels of imported inflation. These risks may be even higher for a country that is ou of the EMU if one takes into consideration the exchange rate risks related to impact of the import prices in euros and import prices in US dollars. A rising euro in the first halfof 2014 added to the growing world deflationary impact. The depreciation of the euro in the second half of 2014 was a prerequisite for limiting deflation in some groups of goods, such as manufactured goods and food.

The expected slow- down of the deflation rate and the reversal of the trend in 2016 may be due to the higher international prices in EUR terms, as a result of the depreciation of the Euro against the US dollar. This will compensate for the expected price decrease of the main groups of commodities in dollars.

These interdependences underline the role of structural and price realignment that Bulgaria has still to undergo in order to join the EMU.The main approach to circumvent higher inflationary trends by domestic policies is further diminishing the administratively regulated prices, increase market competition and stimulate aggregate supply and investments by carrying out structural reforms.

As a factor that has an impact on the level of inflation may be regarded the money market interest rates and the long term interest rates. As seen on Fig.5 the money market interest rates in Bulgaria have followed the trend of the macroeconomic adjustment since 2006 by passing through higher level of rising the price of credit during the deepening of the Global crisis and European sovereign crisis which placed pressure on the market liquidity. In the post crisis period the slowdown of the Bulgarian economy was combined with the availability of savings attracted as deposits and thus the own banking resources have increased in supply. This trend combined with the fall of the demand for new credits has caused accelerated slowdown of interest rates. This is also an inseparable part of the overall deflationary trends since 2009 onwards.

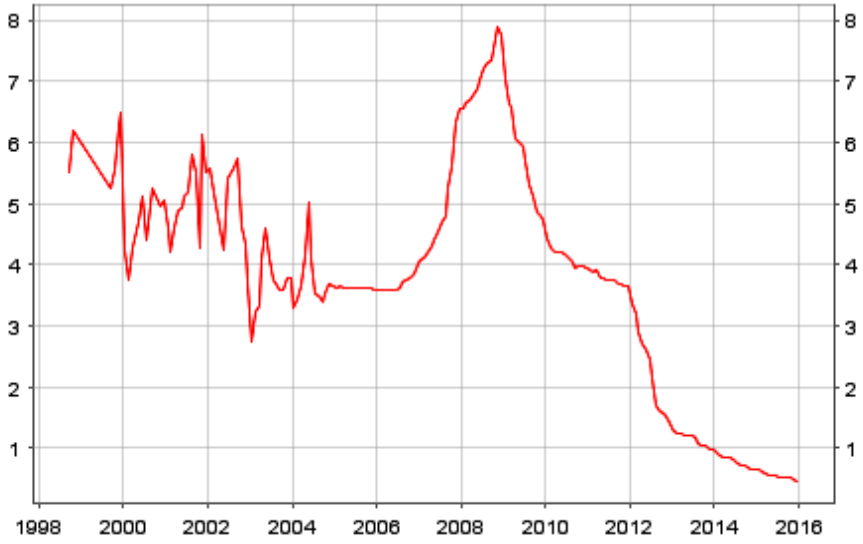


Fig.5. *Money market interest rates in Bulgaria in (2000-2015)*
(3 months (80-100 days) maturity, denominated in Bulgarian lev)

Source: Eurostat, NSI of Bulgaria: Money market interest rates

Another indicator influencing the inflation and inflation expectations is the criterion of convergence of the long term interest rates on the Bulgarian Government debt. The level of these interest rates is indicative for the convergence with the EMU as Bulgaria has had average long-term interest rates that were – to different degrees in separate year – much below the reference value for the interest rate convergence criterion since 2010. As seen on Fig.6, the long term interest rates on the Bulgarian Government securities have fallen considerably which may also be a factor to lessen the pro-inflationary impact of both servicing the debt as well as resorting to issuance of new debt.

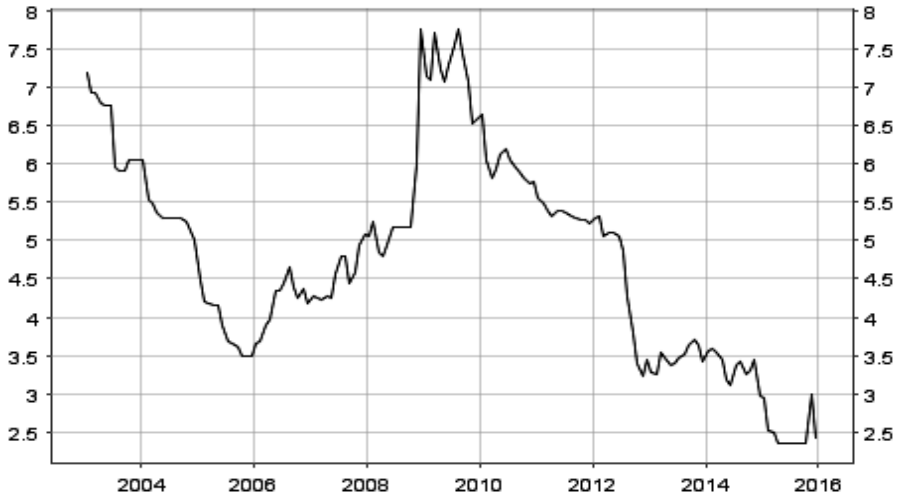


Fig.6. *Bulgaria, Long-term interest rate for convergence purposes*

Source: Eurostat, National accounts statistics.

The low inflation rate in Bulgaria will be challenging in the medium term, given the limited scope for active monetary policy under the existing currency board arrangement Due to the fact that the GDP per capita in Bulgaria is significantly lower than in the euro area, it is difficult to foresee the exact size of the inflation effect resulting from the structural adjustment that is underway. On the Government agenda is to introduce an increase of the minimal wage from 2016 onwards as well as the liberalisation of the market for electric supplies which may cause higher inflation.In medium term the economy is expected to grow at a higher rate and as the income convergence proceeds, price level convergence is to continue. The outcome will depend also on the choice of the model of growth of the Bulgarian economy (Minasijan, 2011). This, in turn, would manifest itself in terms of higher domestic inflation, given the fixed nominal exchange rate..

As a new EU member state Bulgaria has no opt-out choice as regards the EMU and thus has the status of a Member State with a derogation. The convergence with the EMU requirements has been most pertinent by the gradual process of alignment of Bulgaria's fiscal policy with EU requirements.Objectively the economic growth in terms of positive rates since 2004 has made possible to maintain the public finances adequately and to achieve a budget surplus since 2004 up to 2009. At the same time complex political and economic reasons justify the postponement of Bulgaria's participation in ERM II as the Convergence report points out to the need of decreasing the external imbalances and improve the labour market. In practice, the deterioration of the indicator for government deficit for 2009 up to 4.3% of the GDP led to the imposition by the European Commission to Bulgaria a procedure for excessive deficit (see Fig. 7). In the subsequent years, and currently by adhering to the new rules and requirements to the government finances, Bulgaria has again restored the compliance with Maastricht criterion by adhering to consolidation of fiscal policy and improving the discipline of execution of the state budget.

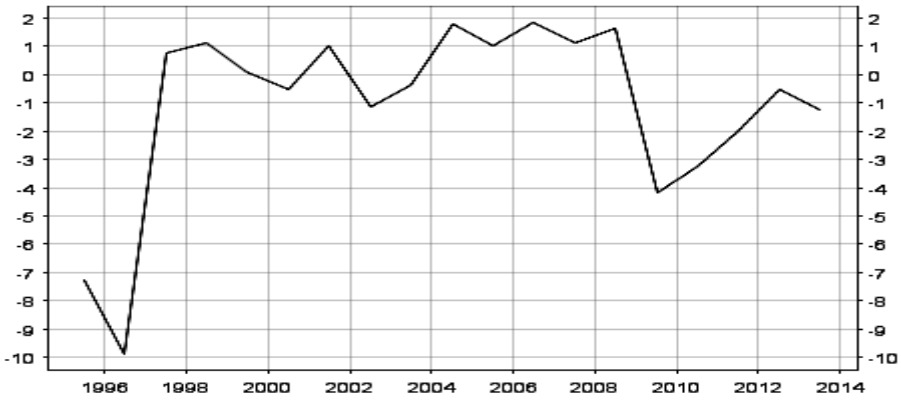


Fig.7. *Government Budget deficit (-) or sufitsit (+) of Bulgaria (% of GDP)*

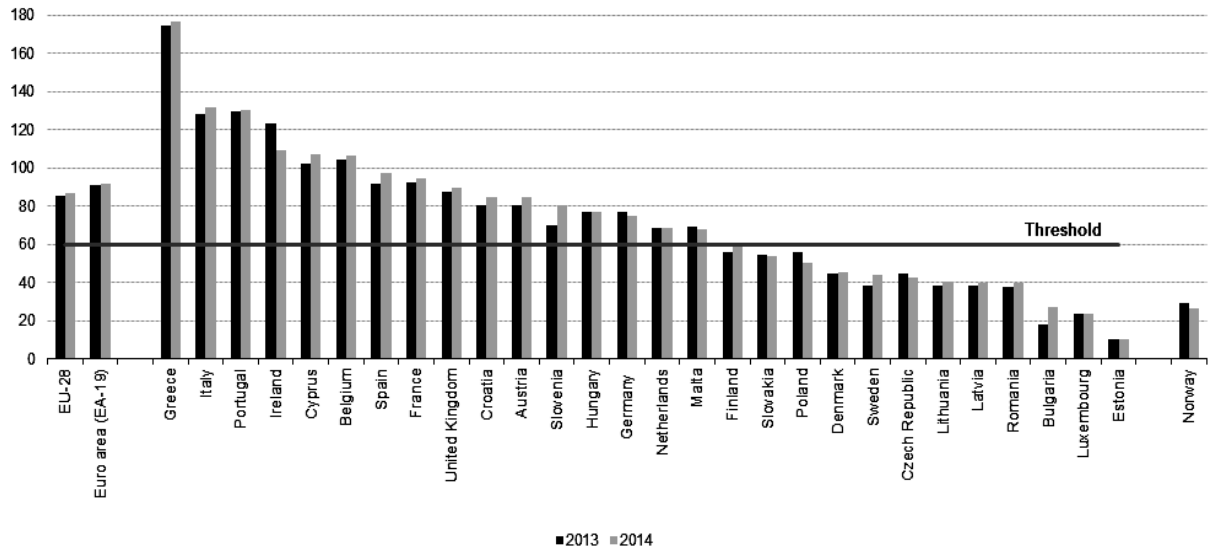
Source: Eurostat, 2015. Data for 2015-2016 are estimates.

In fact after a temporary deterioration in the budget deficit in 2009 there was a relatively rapid return to a trend of improving macroeconomic behavior in accordance with the Maastricht criteria. This has been set as a target in the Government fiscal policy also for 2015-2016. The Convergence Programme of Republic of Bulgaria for 2014-2018.

As regards the indicator for an average annual rate of growth of the public debt-to-GDP Bulgaria has had consistently consolidated its fiscal policy throughout the period (1998-2015) and fiscal discipline has been much strict if compared with other EU countries (Fig. 6). The need to provide state aid to meet the needs of the deposit guarantees repayments after the closure of Corporate commercial bank and the liquidity support for other 2 domestic banks in crisis has caused rapid increase of the Government debt-to-GDP ratio in 2014.The steep rise of this ratio in 2014 caused the assessment of Bulgaria as a country with imbalances by the European Commission's Alert mechanism for greater macroeconomic imbalances. By end of December 2015 the government debt-to-GDP ratio is 26.4%, with the share of domestic government debt being 8.5% and of external government debt – respectively equal to 17.9% of GDP. In the government debt structure, domestic debt at the end of 2015 amounts to 32.1%, and external debt - to 67.9% of the total debt. Any further rise of this indicator for the Government debt may present a challenge to fiscal policy sustainability.

The debt-to-GDP ratio is subject to the threshold of the Maastricht criteria on public debt..In spite of inceasing the government debt-to-GDP-ratio Bulgaria is still much below the reference value of the 60% of GDP which is the threshold of this criterion of Maastricht.The comparison with other EU member states, including EMU member states shows that Bulgaria's debt is below the reference value (Fig.8).

Another feature is the structure of this Government debt as being issued and sold abroad and in the country. The currency composition in which the Government debt has been issued is indicative for the high degree of Bulgaria's euroization.The debt currency structure as of end-December 2015 is as follows: 75.9% in EUR, 23.0% in BGN, 0.6% in USD and 0.4% in other currencies. As regards the currency composition of payments, since the beginning of 2015 the greatest is the euro-denominated share - 65.5%, followed by those in USD - 24.2%, in BGN - 10.1% .



(1) Data extracted on 21.04.2015

***Fig.8.** Comparison of EU countries in Maastricht criterion indicator for share of public debt in GDP (%)*

Source: Eurostat (online data code: tsdde410)

The achieved good discipline in government finances of Bulgaria deserves to be acknowledged. As seen in Figure 7, Bulgaria's indicator for share of public debt in GDP is below the threshold of 60% of GDP – less than 30% of the GDP. Nevertheless, due to the fact that the unfavourable conditions of the European sovereign crisis in the Euro area countries have lasted longer than expected, there is an objective necessity to take account of the need to implement the reforms in the EU that are targeted to deepen the integration capacity of the EMU.

2. Main characteristics of the development of the financial sector in the period (2007-2014)

In the period (2007-2014) the financial intermediaries in Bulgaria and the bank-credit and capital markets are under the effect of slowing the pace of growth and speedier transmission of the negative effects of the global and the European debt crisis. The most direct result has been observed in the contraction of credit expansion and reducing the inflow of foreign investments. The overall impact of the crisis to reduce economic activity determines the sharp contraction of credit volume in 2010, continuing decline to zero in 2013 and the new fall by 7% in 2014. The increase of economic growth rate of Bulgaria to 2.9% in 2015 has not been supported by an increase of credit to the non-financial institutions.

The overall negative impact of the post-crisis slow recovery of the world and European economy contributes to the uncertainty in the business climate in Bulgaria and the low demand of new loans and investments. The most significant decline is observed as regards loans to non-financial institutions, which reflects the ongoing economic stagnation in the real sector. This credit crunch has also been to some extent a reflection of depleted debt capacity of companies in the real sector to apply for new loans. This has also confirmed the trend that along with the sharp reduction of new loans also a reduction of the deposits of non-financial institutions has been observed. To a lesser degree, but continuing trend is the decline in the volume of mortgage lending, reflecting the economic stagnation. Overall dominant trends in bank lending reflect the slow recovery as the deflation has contributed to lowering the interest rates on deposits but much smaller has been the reduction of the interest rates on credits. On the one hand, companies are reluctant to draw new credits and investment loans due to lack of favourable conditions for business development. Households are under budget constraint to demand for new loans mainly due to the need of coping with their high exposure to servicing former debt and the constraint to maintain current spending. The medium-term downward trend in mortgage loans since 2008, has been reflecting the overall decline in demand and the impact of the already accumulated debt of businesses.

Despite the growth of savings in the banking system (nearly 10% annual growth in deposits of non-financial legal entities and individuals and households) there has not been observed an increase in loan demand. Increased liquidity of banks favours undoubtedly the drastic decline of interest rates on deposits in 2014-2015.

The fact is that in conditions of global crisis the growth of domestic savings has allowed to avoid adverse effects of certain reduction of cross-border lending liquidity resources of subsidiary foreign banks in Bulgaria. This reflects the general trend observed in the global economy to increase the role of domestic savings as a possible source of credit resources of banks emerging from the crisis (Global Financial Stability Report, 2015). There is a process of reduction of interest rates on deposits, which in mid-2014 and the first half of 2015 has dramatically been introduced in the banking system. The growth of deposits testifies to the sinking aggregate demand but stimulating sufficient liquidity to cash-loan market.

Table 1.

Dynamics of loans and deposits in the banking system in Bulgaria for the period (2008-2014) (in%)

	2009/2008	2010/2009	2011/2010	2012/2011	2013/2012	2014/2013
Mortgage loans	8%	4%	1%	1%	-1%	-1%
Consumer loans	7%	-4%	-2%	-2%	2%	-1%
None-financial institutions loans	3%	4%	6%	6 %	0%	-10 %
Total Loans	4%	2%	4%	4 %	0 %	-7 %
Deposits of individuals and households	12%	13%	14%	12 %	9 %	4 %
Deposits of non-financial institutions	-6%	3%	11%	3 %	7 %	-2 %
Total deposits	4%	9%	13%	9 %	9 %	2%

Source:BNB

Although credit growth has been significant in Bulgaria for nearly a decade with extremely high annualized rates, a time exceeding 50%, it has since declined with the onset of the Global financial crisis. Banks' long term funding has declined in relation to total liabilities, even while funding from parent banks to domestic subsidiaries has increased. For the banking system as a whole, resident bank deposits declined by 21% between the third and fourth quarters of 2008, but have recovered ever since. Domestic interbank market borrowing also declined but has rebounded in 2009. In part due to global conditions, bond market funding for banks declined substantially since the first half of 2008, while third party (non parent) foreign banks and investors reduced most funding to the domestic banking sector.

At the same time parent bank funding increased by 24% from midyear 2008 through the first quarter of 2009, reflecting a strong commitment of foreign bank shareholders to Bulgarian subsidiaries. These funding shifts and other developments have been reflected in increases in the aggregate loan to deposit ratio .The need to strengthen transparency provisions in corporate law has been considered to ensure a full and reliable identification of interconnected exposures with banks, shareholders and owners, to assure that changes in funding sources count on the proper accounting of liquidity and solvency requirements on a more consolidated scope.

The second adjustment of the financial sector has been in the period (2009-2015).The Bulgarian National Bank (BNB) actions have helped to ensure financial stability in the banking sector. The BNB has taken measures to increase the banks' capital and liquidity cushion by releasing existing prudential "buffers", for example by lowering the reserve requirements and working with parent banks to ensure credit lines to foreign-owned subsidiaries remained available and profits.are recapitalized. The BNB intensified its monitoring, strengthened stress testing capabilities45 and reviewed the crisis management framework as a contingency measure.46

The overall negative impact of the post-crisis slow recovery of the world and European economy contributes to the uncertainty in the business climate in Bulgaria and the low demand of new loans and investments. The most significant decline is observed as regards loans to non-financial institutions, which reflects the ongoing economic stagnation in the real sector. This decrease is to some extent a reflection of depleted debt capacity of companies in the real sector for new loans. This has also confirmed the trend that along with the sharp reduction in new loans is observed decrease in deposits of non-financial institutions. To a lesser degree, but continuing trend is the decline in the volume of mortgage lending, reflecting the economic stagnation.

[45] The BNB conducts stress tests on a quarterly basis in order to analyse. Several types of risks, but the most relevant and quantitatively significant to the Bulgarian context are credit risk and liquidity risk. Market risks only constitute a small share of the capital requirement.

[46] On November, 27, 2008, the BNB Governing Council adopted amendments to Ordinance No. 21 on the minimum required reserves maintained by banks with the central bank: (i) effective December 1, 2008, the minimum required reserves on all attracted funds of the banks are decreased from 12 percent to 10 percent;

(ii) effective January 1, 2009, the minimum required reserves on funds attracted by the banks from abroad decreased from 10 percent to 5 percent; and (iii) effective January 1, 2009, no minimum required reserves is imposed on funds attracted from the state and local government budgets. Currently the BNB considers there is enough liquidity in the banking system and a further reduction of required reserves is unlikely to reduce interest rates.

Fig.9. *Annual growth rate of banks' loans to non-financial institutions in Bulgaria (in%)*

Source: Eurostat. Bulgaria, MFIs excluding ESCB reporting sector - Loans, Total maturity, All currencies combined - Domestic (home or reference area), Non-Financial corporations sector, Annual growth rate, data Neither seasonallynor working day adjusted.

Overall dominant trends in bank lending reflect also the deflationary trends that contribute to lowering the interest rates on deposits and to a smaller extent on credits. The risk of deflation and the reduction of demand are negatively influencing the business expectations and thus add up to the credit crunch. On the one hand, companies are reluctant to draw new credits and investment loans; on the other hand, households are limited to demand for new loans mainly as already have high exposure to servicing debt and current spending mortgage loans since 2008, also

Despite the growth of deposits of savings in the banking system (nearly 10% annual growth in deposits of non-financial legal entities and individuals and households) there is not an increase in loan demand and new loans. Increased liquidity of the banks makes easier the drastic decline of interest rates on deposits. In the presence of the growth of deposits in the banks the competition increased among the banks. The fact is that in conditions of global crisis the growth of domestic savings allow to avoid adverse effects of certain reduction of cross-border lending liquidity resourcesfrom abroad for subsidiary foreign banks in Bulgaria. This reflects the general trend observed in the global economy, i.e. by increasing the role of domestic savings as a possible source of credit resources of banks to stimulate the credit (IMF, 2015). There is a process of reduction of interest rates on deposits, which since mid-2014 has accelerated across the banking system. The growth of deposits testifies to the sinking aggregate demand of goods and services and risks of the deflationary trends.The consequence of these trends is a small reduction of the net interest revenues from loans to banks and to a less extent the reduction of the net revenues from commercial credit (Fig. 10).

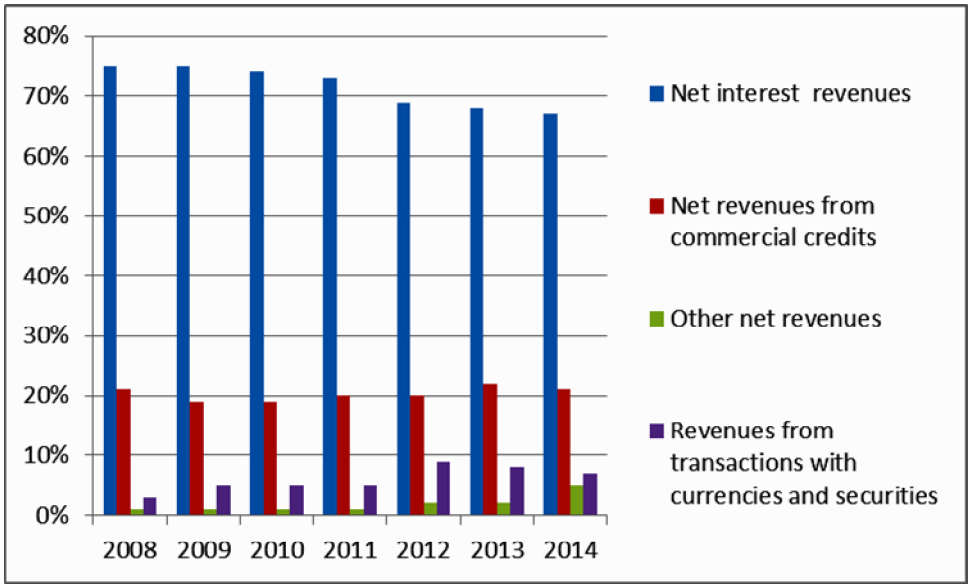


Fig.10. *The structure of the revenues of the banking sector in Bulgaria (in % of total revenues)*

On revenues and expenditures of banks reflect substantial changes driven by the impact of the financial and economic crisis. The strong increase in provisions reflects the problems of bad loans and the continuing difficulties in collecting receivables unattended loans. This is the most important factor that affects a substantial reduction in the annual profit of the banks in the period (2009-2013). From 2013up to now, there was a small increase in bank earnings compared to previous years, but slowdown of economic recovery did not allow to increase the net positive effect on banks. Since the crisis in 2008 there is a deterioration in the portfolios of commercial banks with the growth of non-performing loans (amounting to 20% of total volume of bank loans) which has made banks to be more selective in the assessment of the creditability of the clients. In the presence of the growth of deposits in banks the increased competition ending, especially in connection with the refinancing of other banks' customers. The consequence of these trends is the reduction of interest income from loans to banks and reduction of their expenses to pay interest on deposits.

3.The implementation of the reforms in the financial sector

In assessment of the impact of the European financial crisis on the Bulgarian banking system one may distinguish two periods of structural adjustment of the financial sector as follow-up of Bulgaria's accession to the EU.

Under the conditions of the Global crisis and its impact on the European banks the BNB as central bank of Bulgaria introduced important anti-crisis measures to support the liquidity management of the banks. 47 Bulgaria has harmonised its legislation with the EU law that has been urgently introduced in 2008 as regards the deposit insurance schemes. In compliance with the EU regulation the threshold for the deposit schemes guarantee has been raised and Bulgaria's Central bank has joined the Vienna initiative of the Central banks of the new EU member states.48 The banks' capital cushions have been kept adequate compared to other European countries: the average capital ratio for the system is reportedly close to one quarter above the regulatory minimum at around 16%.

Under these conditions the transposition of important EU directives in the banking sector of Bulgaria is inevitably associated with substantial changes which are to contribute to the preparation for the EMU entry.

The transposition of important EU directives in the banking sector in Bulgaria is inevitably associated with substantial changes. Some of them must be taken in response to the crisis from the middle of 2014 when after acute liquidity attack against several credit institutions have the need to take measures. With state aid was possible to overcome the liquidity problems of First Investment Bank the crisis and closure of the Corporate Commercial Bank have created tensions and threatened the stability of the banking system. The public cost of this crisis is not finalised yet.

On the other hand, essential interventions of state institutions have been undertaken after placing the Corporate Commercial Bank in 2014 under special supervision because of the abuses found, bad practices and violations of banking regulations and the subsequent withdrawal of its license by the Bank. Observed crisis is managed not only at the expense of accumulated bank buffers. By additional measures as well as by the BNB and the government aid is to avoid the spreading of negative effects on the rest of the banking system. The case of Corporate Commercial Bank has raised on the agenda many issues that concern the harmonization of the regulation of banks with

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[47] On November, 27, 2008, the BNB Governing Council adopted amendments to Ordinance No. 21 on the minimum required reserves maintained by banks with the central bank: (i) effective December 1, 2008, the minimum required reserves on all attracted funds of the banks are decreased from 12 percent to 10 percent;

(ii) effective January 1, 2009, the minimum required reserves on funds attracted by the banks from abroad decreased from 10 percent to 5 percent; and (iii) effective January 1, 2009, no minimum required reserves is imposed on funds attracted from the state and local government budgets.

[48]The Bulgarian Deposit Insurance Fund (BDIF) is a legal entity established by the 1998 Law on Bank Deposit Guarantee. The Fund protects depositors' funds in banks up to BGN 196,000 (EUR 100.000) as well as creditors' interests in bank bankruptcy proceedings .

the modern changes by implementation of Basel III and the EMU reforms as well as proper banking supervision. The bank supervision is another area of EU new regulatory and institutional reforms which is yet to undergo important changes in Bulgaria.

Due to the need to introduce newly Capital Requirements Directive and a Regulation on the capital requirements serious changes were made to the Credit Institutions Act and in the secondary legislation. For example, a fundamental change is the elimination of Ordinance № 9 of BNB, which lays down specific provisions for credit risk. In place of the appropriations to the change in the legal framework specific provisions, banks should carry out additional accounting provisions in International Financial Reporting Standards, aimed at reduction of the carrying value of loans in arrears over 90 days. All these changes have a particular impact on individual credit institutions at home and mid-term will lead to a further deepening of the process of harmonization of regulatory changes in the European financial space.

The recent changes to the EU framework have, however,limited some flexibility of the supervisory department of the BNB. Previously the BNB applied a minimum capital adequacy ratio of 12 percent, but this requirement is now capped at 8 percent under the Capital Requirements Regulation. In response, and at a period of heightened systemic stress, the BNB has “frontloaded” capital buffers so that the capital conservation buffer and the systemic risk buffer are both currently in force. The advent of the CRR and its implementing technical standards has also removed the BNB’s former power to set supervisory provisions against problem exposures. The BNB retains, however, the power to set higher capital requirements in respect of problem assets. At present the BNB is practicing close monitoring of the evolution of the relevant portfolios and is exercising what might be termed an “informal Pillar 2 approach.” The BNB does, however, need to be ready and able to apply additional capital requirements through Pillar 2 in future.49

In implementation of EU law, Bulgaria introduces the reforms undertaken in the EU, as regards the explicit consideration for the financial sector responsibility for sharing the losses by establishing a new regime for recovery and resolution of credit institutions and investment firms. The reform in the EU has to achieve in an accelerated mode the results similar to normal insolvency proceedings regarding the allocation of losses to shareholders and creditors, but improved management with a view to preserving financial stability and limit losses to taxpayers when the announcement of the bank/firm in bankruptcy would threaten the public interest and would constitute a threat to financial stability.

For this purpose, the transposition in the Bulgarian legislation of Directive 2014/59/EC by a special law creates legal prerequisites for a framework for the recovery and resolution of credit institutions and investment firms. The Directive aims to establish an effective framework at European level to deal with banking crises enough at early stage, so as to prevent the spread of the financial problems of individual credit institutions on the entire banking system, and to eliminate in as much need to use

At the present stage there are further changes in the regulatory framework which the banking system in Bulgaria will undergo to implement the new European regulations, standards and practices. The crisis has pushed the changes for the better to design prospective reforms by focusing on ensuring financial stability and in pursuing financial integration. The newly designed institutions and rules raise higher the requirements to comply with the EMU governance principles and institutions.

In 2015 the BNB as Central Bank declared its readiness to review the quality of assets in all banks operating in Bulgaria. This review will be a key requirement if the government initiates a negotiating process with the ECB to join the single supervisory mechanism. The methodology of the review will

[49] Capital adequacy has been calculated under the EU Capital Requirements Regulation since January 2014, which permits a slightly more generous treatment for some risk weights than the previous BNB regime. As of December 2014, the system CAR stood at 22 percent, and the Tier 1 capital ratio was 19.9 percent. In Bulgaria, the majority of tier 1 is held in common equity and the system wide ratio was 19.5 percent. With the advent of the CRR, the BNB can no longer apply a minimum 12 percent CAR as it had formerly done. The BNB has however, imposed the capital conservation buffer of 2.5 percent since May 2014 and has also applied a capital buffer for systemic risk of 3 percent of total risk weighted exposures located within the country and calculated in accordance to Article 92 (3) of Regulation 575/2013/EC.

be built on the highest standards already developed and implemented by the ECB in 2014 in reviewing the quality of the assets of the largest banks in the euro area. The launch of the process will be a function of the progress and implementation of the new Directive on recovery and resolution of banks.

Agenda priority for 2015 has been to restore confidence in the BNB as Central Bank and in the institutional order that ensures the stability of the banking system. Not only the election of the Governor of the National Bank, but the implementation of comprehensive reforms in the financial intermediation are undertaken to ensure the sustainability of financial intermediation and its significant role in the economic development of Bulgaria.

The banks and investment firms are setting new the requests for the preparation and updating recovery plans containing measures and procedures for: 1) taking early action in case of worsening of their financial situation; 2) preparing the development and restructuring plans for the restructuring of a bank or investment firm; 3) compliance of the plans with the requirement to minimize losses to taxpayers and preserve critical core activity of the institution functions.

The establishment of a Fund for the restructuring of banks (which will be managed by the Board of the Fund for Guaranteeing Bank Deposits) and Restructuring Fund investment intermediaries (which will be managed by the Board of the Fund for Compensation of Investors) builds the necessary institutional structure in Bulgaria for conducting modern reforms in EU financial sector. In accordance with the requirements of the Directive, the Bulgarian Law on Resolution and Restructuring of Credit Institutions and Investment Intermediaries previews the following tools of restructuring: sale of business, bridging institution, separation of assets and sharing of losses. Two additional tools for restructuring are introduced: a tool for government capital support and tool for temporary state ownership, which are state tools for financial stabilization. Competent authority for deciding on the application of these instruments is the Council of Ministers on a proposal of the Minister of Finance.

The Bulgarian National Bank (BNB) has encountered difficulties with the banking crisis in 2014 but its actions have helped to ensure financial stability in the banking sector. The crisis began in June 2014 with two bank failures – the KTB and Viktoria Bank. Following runs on deposits, the BNB put the two banks into conservatorship. Soon after this intervention, a third domestic bank suffered a depositor run and was supported by emergency liquidity (state aid has been approved by the EC and provided successfully). The KTB crisis clearly demonstrated the lack of an institutional framework for crisis management, both in terms of a strengthened preventive role of banking supervision and for regulating the bank resolution processes.

With entry into force of the Law on Recovery and Resolution of Credit Institutions and Investment Firms in 2015, a regulatory framework governing such processes was established. The relevant organisational structures should be established for the resolution activities and drawing up of operational procedures for interaction with the Banking Supervision Department. The BNB has actively monitored and tried so far to mitigate the impact of the global financial crisis. Actions taken to increase banks' capital and liquidity cushion include releasing existing prudential "buffers", for example by lowering the reserve requirements and working with parent banks to ensure credit lines to foreign-owned subsidiaries remained available and profits are recapitalized. The BNB intensified its monitoring, strengthened stress testing capabilities and reviewed the crisis management framework as a contingency measure.

According to an independent external assessment of the effectiveness of the banking supervision in Bulgaria by a joint IMF – World Bank team in 2015 important findings and recommendations on the BNB banking supervision activities are made. The IMF and the World bank assessment indicate some issues of the insufficient degree of conformity of Bulgaria's supervisory practices with the Basel principles and point out how to improve the banking supervision.(IMF,WB, 2015).

In accordance with the Law on Resolution and Restructuring of Credit Institutions and Investment Intermediaries that was adopted in 2015 the BNB is granted a mandate to organize the Asset Quality Review of the banking system, including the check of the quality and the adequacy of the

estimations used for the assets' valuations, collateral and the practices for devaluation and provisioning as instruments previewed by Law.50

The EMU has undergone important institutional and functional changes while the euro area tackles the crisis and reforms its policies and institution. It is acknowledged that the "in-or-out" of the EMU is a question that has become more complex (Rehn, 2013). The design of the EMU reforms is still shaping due to the different approaches of the member states to the issues and the political process (Ville et al., 2015). Surely the present state of the EMU (as considered to be "EMU 2.0.") raises the requirements and the mechanisms and instruments for a higher degree of common system of sharing the burden of making the EMU a more effective and robust functioning Union.

Conclusion

The financial sector encounters two main macroeconomic challenges to Bulgaria : (i) how to speed up and sustain higher GDP growth, and (ii) how to ensure that this growth translates into new employment opportunities. Success in both dimensions will depend on the country's ability to implement the necessary structural reforms in the real and financial sectors. The implementation of the requirements for the EMU entry at the present stage of its new design as EMU 2.0 may be demanding higher costs before being admitted to the full membership. But it is much more rational to get on track of preparation for the EMU entry at a time when the reforms in the EMU are to be introduced.

The adoption of the euro may take place in Bulgaria after several measures are fulfilled: 1)under the auspices of the BNB there is a need to carry out the Asset Quality Review and the stress test of the Bulgarian banking system;

2) an in-depth evaluation of the financial sector of Bulgaria by the IMF Financial Stability Assessment Program (FSAP) and the World Bank is to be carried out by the end of 2016;

3) an analysis of the necessary steps for the realization of the strategic goals is to be reported to all responsible institutions in order that decision be taken for Bulgaria's EMU entry;

The accession to the euro area has been a strategic goal for Bulgaria for more than a decade but since mid2015 it has entered the stage of undertaking operationally planned activities to make the right choice and engage resourceful means to achieve full integration to the European supervisory and financial architecture. The Single Market of the EU will be changing as the differentiated integration within the EMU proceeds further. Beyond this, it is equally crucial that the reforms will contribute to a more effective and robust functioning of EMU.

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[50] The review is going to be done in 2016 in direct cooperation with the European Commission and the European Banking Authority and it is going to be based on the methodology corresponding to the one that has been already applied by the European Central Bank at the start of the European Supervisory Mechanism in the euro area in 2014.

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CONNECTIONS BETWEEN ACTIVE AGING AND FOREIGN DIRECT INVESTMENTS

Camelia MILEA[51]

Abstract

In this article I present the elements that define active aging, the causes of the emergence of this concept. I also highlight some impediments that hinder the accomplishment of the active ageing objective. I also bring forward some of the priorities aiming to support the accomplishment of the active ageing objectives. Active ageing presumes, among others, the existence of an optimal state of health of the old people. The foreign direct investment companies can support or hinder active ageing. One solution for the prevention of population ageing is supporting the values of family and implicitly, stimulating the birth rate. The analysis shows that in Romania, population is undergoing a rather intense process of ageing, which will burden heavily the economy. This evolution is explained by the trend of the natural growth rate and by the high number of abortions.

Keywords: aging of population, causes, prevention measures, hindrances to active ageing

JEL classification: F23, J11, J26

1. Conceptual landmarks on active ageing

Active ageing is a relatively new concept which aims to maintain old people as much as possible in the labour market, to keep them actively involved in the society and to make them age as healthy as possible, so that the people over 65 years can remain active and autonomous in everyday life.

Being a concept which is still under debate, it presumes seeking solutions for practical implementation, while the societies must adapt to its purposes.

The emergence of this concept has been generated by the ageing of the population in all EU (European Union) member states, by the decline of the pension systems throughout Europe, by the lack of labour force. These phenomena generate challenges for the labour market, for the budgets and for the healthcare systems.

I consider the decrease of the birth rates to be among the most important causes of population ageing. The more career's importance is promoted among women, the more diminishes their interest to build up a family and to give birth to children. Another cause is the increase of life expectancy.

Active ageing depends on mentality, culture, tradition, health state, working conditions during the all life (stress, overworking), the conditions of life (poverty, pollution).

Within this context, the European Year 2012 aims to encourage *active ageing in three directions* (Ministerul Muncii, 2012):

- *Participation on the labour market*. As life expectancy increases, the retirement age rises also in Europe, at the same rate with the fear of losing the job or of not being able to get another one that may ensure a decent retired pay. Therefore, old workforce must have better conditions on the labour market.

- *Active role in society*. Retirement must not mean lack of activity. The contribution of old people to the development of society, as people that take care of other people (parents, spouses, grandchildren), or as volunteers, is often overlooked. One of the objectives of the European Year is to highlight the important part played by old persons in society and to create better conditions for their welfare.

- *Autonomous lifestyle*. As people grow old, their health deteriorates, but this process can be slowed down. Also, measures can be taken to adapt the environment better to people with health

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problems or with disabilities. Active ageing also presumes the provision of the necessary means for remaining as much as possible masters of our lives (Vasile, 2015).

Therefore, the concept of active ageing implies finding ways of using the experience, skills and other qualities which old people have and that can be used to serve the society. This is a challenge. The European Year aims to change the perception according to which old people are a burden for the society, highlighting their potential and opportunities, not the obstacles and deficiencies.

I also notice that active ageing has a multidimensional character, since it presumes occupational, healthcare, dwelling, social protection (pensions and social care), education, culture policies, as well as other services of general interest, thus ensuring the social cohesion and the construction of a society for all ages.

I may remark some impediments that hinder the accomplishment of the active ageing objective:

- when old people don't have access to the treatment they need or they have not the money for medicines (the case of Romania);

- when old people don't have money to buy quality, healthy food that can prevent the onset of diseases;

- depending on the level of income and working conditions, there are people paid so badly or working in so hard conditions that they prefer the retired payment, no matter how small it is;

Among the priorities aiming to support *the accomplishment of the active ageing objectives*, I consider to be the following:

- the existence of an efficient and affordable healthcare system and the implementation of solutions to monitor and prevent the chronic diseases;

- ensuring optimal working conditions for a healthy ageing and for the prevention of professional diseases,

- work security,

- ensuring the access of old people to jobs and the implementation of projects that involve them in the life of the communities, so that they remain active,

- life-long training,

- the prevention of accidents by falling, with a high rate among old people, and the design of buildings adapted to the needs of old people.

One solution for the prevention of population ageing is supporting the values of family and implicitly, stimulating the birth rate.

2. The European Union and active ageing

Europe 2020 Strategy for labour force employment and smart, durable and inclusive growth relies on five main objectives of the European Union, which are currently measured through 8 indicators. One of these objectives refers to a 75% employment rate for the population aged 20-64.

A recent Eurobarometer shows that 71% of the Europeans are aware that the population of the continent is ageing. However, only 41% of them are worried by this situation. The European Commissioners for Health, John Dalli, and for Labour, Laszlo Andor, fit into this category. They highlighted that this perception of the people is in strong contrast with the perception of the political decision-makers, who regard population ageing as a major issue for Europe. The people of the member states have very different perceptions about the terms "old/young". For instance, in Malta, Portugal and Sweden, only the people under 37 are considered young. At the opposite side, in Cyprus and Greece, all the people under 50 are considered to be young. The EU average shows that above the age of 64 people are regarded as old, while after the age of 41 they are no longer considered to be young (Haşu, 2012).

Retirement is a delicate subject, concerning the prolonging of the retirement age. Thus, only a third of the Europeans agree with the prolonging of the official age for retirement in all states by 2030.

Within this context, I consider that the prolonging of the working age (of the retirement age) must be the decision of each individual person, depending on his/her health state and aspirations.

At EU level, there are no common policies and projects for active ageing. For the time being, there are only some recommendations, but the idea that the situation is very different from one country to another is accepted, different measures being thus required. In Denmark, for instance, age-friendly country, projects are already in progress. There are companies which have special projects for their employees aged 65+, even in difficult areas such as constructions. There are also companies which created mixed teams – young and old people, to work together. There also are NGOs which provide projects to keep old people active.

However, there are also countries in which old people have serious problems. This is the case of Romania too, where many people live on the edge of poverty, with no money for medicines or for a decent standard of living.

3. Romania and the active ageing

In Romania, population is undergoing a rather intense process of ageing, one of the fastest in EU, according to the forecasts, which will burden heavily the economy.

I consider that the most important cause for this is the drop in the birth rate (see Figure 1), on the background of a very high, although decreasing, number of abortions (see Figure 2). One may notice that the natural growth rate has been negative since 1992 up to present, within the context of a slight increase of the mortality rate and of the discontinuous decrease of the birth rate (see Figures 1 and 3).

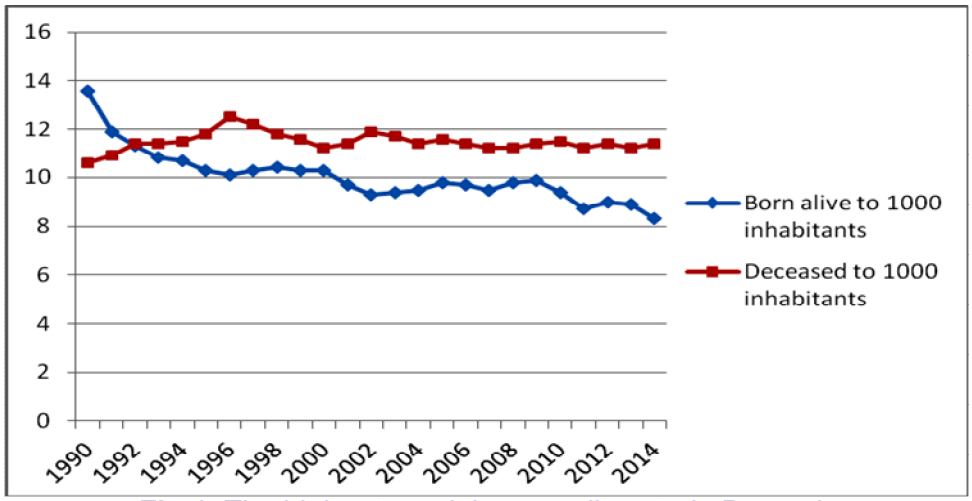

Fig.1. *The birth rate and the mortality rate in Romania*
Source: NIS

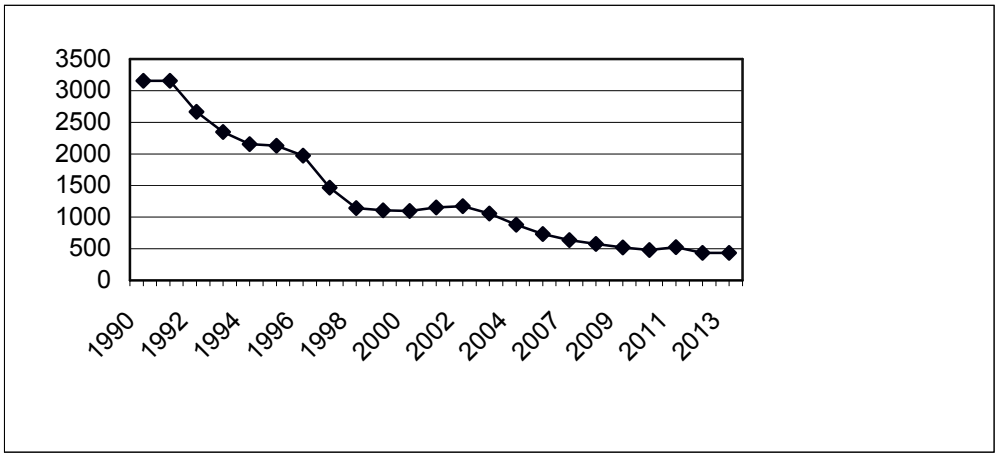

Fig.2. No. of abortions to 1000 born alive in Romania
Source: NIS

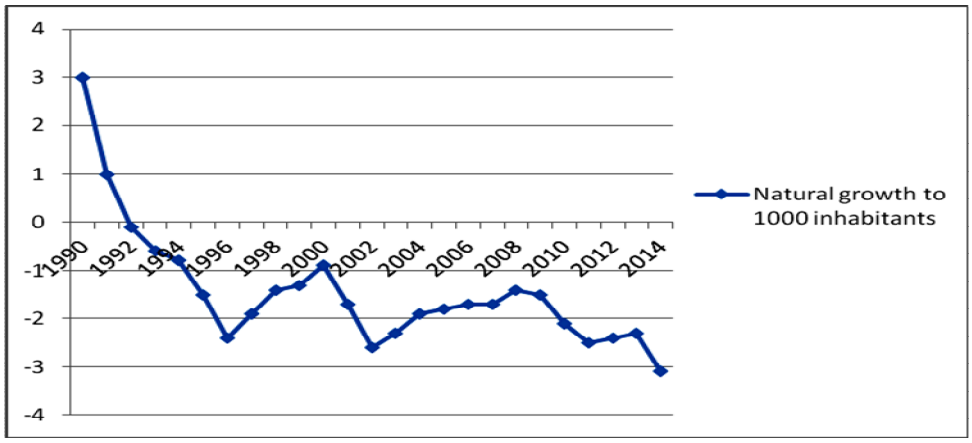

Fig.3. *The natural growth rate in Romania*

Source: NIS

In this situation, I consider that action should be taken at the roots of the phenomenon of population ageing. Important solutions for the prevention of this process consist in stimulating the birth rate, the marriage and putting a stop to abortions, thus preventing the situation in which the state budget cannot support the system of pensions and healthcare insurances for the retired people, and ultimately, supporting the perpetuation of the Romanian nation.

The statistics (Ghinararu, ?) show that in Romania, the graduates of higher education have the highest employment rate (82%) among the people of working age.

Compared to EU-27 average, Romania has lower employment rates for the categories of young and adult people. The situation improves as the age increases. One may conclude that Romania does well with the active ageing compared to EU-27 average, but the situation is more difficult for the young and adult people.

Among the causes for this situation there are the cultural pattern, the economic and social conditions, the existence of a large sector of household production for private consumption.

Corroborating the data of three indicators (the proportion of old people within the total population, the proportion of employed people within the total old people and the proportion of retired people due to disabilities within the total number of retired people) we can notice that there are three regions in Romania that are very aged demographically: South-Muntenia, South-East (Dobrogea, Southern Moldavia and Eastern Muntenia) and South-West (Oltenia).

At the opposite side, there is the North-East region, with the highest employment rate for the age of 55+.

One can also notice, in Romania, the high proportion of people over 55 that retired due to invalidity.

Among the hindrances to active ageing in Romania there are the mentality of people, the inefficient and, sometimes, inaccessible healthcare system, the insufficient level of the pension for many of the retired persons.

Due to the strong ageing of the Romanian population, the government has implemented measures similar to those from other countries worldwide, and especially from the EU member states regarding, particularly, the prolonging of the active life and avoiding the early drop out from the labour market, but also limiting the early retirement and the retirement due to invalidity, and the gradual increase of the retirement age. These measures might be considered as positive if the actual situation of the old people in Romania should not be taken into account: either they have medical conditions, or they are marginalized by the employers (particularly in the private companies) and pushed towards early retirement or dismissal, or they are waiting for the legal retirement age and conditions and they don't want to go on working.

Re-employment of the old people has no benefit for them and they often make a pension/wage trade-off, seeking objectively the advantages and disadvantages of re-employment in a domain that lacks labour force and is not attractive for the young people, or in a field which requires additional experience and expertise. The public institutions can and should develop programs not just for the

active prolonging of the retirement age, but also for the employment of young people and towards the co-participation of the old people to young people training (apprenticeship), with the view to ensure a smooth transition from one generation to another, with no problems to the production flow. To this purpose, the national and EU programs supporting the active ageing should also take into consideration to stimulate the investments in these areas, to grant fiscal facilities for the companies that employ young people while preparing the retirement of the old persons that are working on those particular positions.

4. Foreign direct investment companies and the active ageing

In evaluating the topic of active ageing, it is extremely important to take into account the culture of the host country and of the companies that make direct foreign investments. A country, respectively a foreign direct investment company coming from a country with a high social or educational culture will be more concerned about active ageing, than another one, from a country with a lower level of development, which will consider those issues as insignificant.

Active ageing presumes, among others, the existence of an optimal state of health of the old people. This depends on several factors among which healthy food is very important, and this also depends on the foreign direct investment companies operating in the food industry. They influence the quality and security of foods, which depend on the ingredients, on the observance of the ethical principles in business, on the existence and observance of the food production regulations. Therefore, foreign direct investment companies can support or hinder active ageing.

The state of health of the old people also depends on the working conditions during active life. In the foreign direct investment companies (at least in the case of Romania), people work additional hours, the work is under stress conditions, in a competitive environment. Thus, it appears that foreign direct investment companies promote elements that are detrimental to active ageing in our country.

Pollution also affects the health state, thus the active ageing. The foreign direct investment companies can prevent pollution or can generate pollution, hence they can support or hinder active ageing.

Foreign direct investments can contribute to the improvement of the socio-economic climate of the country, area or region where they are made, by improving the situation of the old people, by increasing the employment rate of old people (aged 55-59, and 60+) and by reducing the unemployment rate among the people close to retirement, threatened by unemployment.

These actions concerning employment of old people depend on the work performance of the old persons, knowing that foreign direct investment companies care very much for work productivity. This depends on the area of activity, on the person's state of health, etc.

The training courses organised by the foreign direct investment companies support education improvement, thus active ageing.

In order to evaluate the contribution of foreign direct investments to the improvement of the social indicators regarding active ageing, the following impact indicators could be used: the elasticity of the employed old population in relation with FDI ($\Delta EOP/ EOP0)/(\Delta FDI/FDI0$), the elasticity of the unemployment of the old people in relation with FDI(($\Delta UOP/ UOP0)/(\Delta FDI/FDI0$). The indicators can be calculated at the regional, local or country level, at the urban and rural level and even at the level of companies from the same branch of activity, some receiving foreign direct investments and other not receiving foreign direct investments.

5. Conclusions

In accomplishing the active ageing objectives it is extremely important to have an accessible and efficient healthcare system and labour market opportunities: only the healthy people willing to learn can be active. To this purpose, I appreciate that a sufficient level of the retired pay is necessary, and also a change in the mentality of people.

I consider that the prolonging of the working age (of the retirement age) must be the decision of each individual person, depending on his/her state of health and aspirations.

The analysis shows that foreign direct investment companies can support or hinder active ageing.

Thus, foreign direct investment companies can support active ageing by creating decent working conditions (no stress, no professional diseases), by preventing pollution, by not laying off the people approaching the retirement age and by co-participating old people to the training programs for the young persons (apprenticeship), taking advantage of their experience.

Also, public institutions should support the employment of young people and the participation of the old people to young people training, in order to ensure a smooth transition from one generation to another, by different fiscal facilities.

In Romania, the characteristics of many persons close to the retirement age (the health problems, the aspirations, the treatment of employees) make the concept of active ageing not feasible.

Following the data analysis in Romania, I consider that first and most important it is to take action at the roots of the phenomenon of population ageing. One solution for the prevention of population ageing consists in supporting the values of family and implicitly, stimulating the marriage, the birth rate and putting a stop to abortions, thus preventing the situation in which the state budget cannot support the system of pensions and healthcare insurances for the retired people, and ultimately, supporting the perpetuation of the Romanian nation.

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MONETARY POLICY AGAINST FINANCIAL STABILITY IN THE REPUBLIC OF MOLDOVA

Olga TIMOFEI[52]

Abstract

The financial stability of a country is one of the most current and most discussed issues worldwide. Until the global financial crisis, the financial stability achievement was strongly subordinated to monetary stability, which is considered the priority task of the central bank. But the last evolutions have shown that financial stability involves certain more complicated problems of measurement and definition, more of those that belong to central bank proficiency. The paper's aim is to analyze the ability of NBMs' monetary policy, to maintain the financial stability of RM within the limits of its objectives and duties, in order to highlight the causes of financial instability and in providing solutions overcoming them.

Keywords: Financial stability, monetary policy, price stability, financial crisis.

JEL classification: G01, G28

Introduction

The international financial crisis which began at the end of the first decade of the XXIst century imposed monetary authorities in tandem with academia to review monetary policy instruments and their impact on financial stability and sustainable economic growth. The lately achieved successes in the accomplishment of the primary objective of monetary policy pertaining to the maintenance of price stability have not brought the expected results for the real sector. Regardless of low inflation rates over the medium term, it wasn't recorded an economic recovery as many people expected.

At the moment, a good example in this sense would be the European Central Bank, which implements a series of unconventional measures to combat the risk of installation of low inflation for a long time: from negative interests to the liquidity of banks, in order to encourage lending (ECB, 2014). Thus, through various monetary policy mechanisms it is tried to facilitate the process of money creation by commercial banks in such a way that they in turn expand their business funding in the real sector, in order to achieve real economic growth (Weidmann, 2015).

These decisions have as grounds the economic theory developed by many economists, and are based on the fact that avoiding the development of disinflation processes in economy can be done by increasing the money supply in circulation (Taylor, 1996, Keynes, 2009, Brăilean, 2006; Ignat, 2002).. Thus, the mechanisms of monetary policy seek to stimulate money growth in order to create the required minimal inflation for sustainable economic growth.

The description of the problem

Until the beginning of the financial crisis, the relationship between price stability - financial stability was based on the belief that both types of stability maintain and protect each other mutually on long term. Most of the economists delimited price stability as a necessary and sufficient condition for financial stability.

Inflation is largely perceived as the main factor in generating financial instability. The solution for financial stability seemed simple: a monetary policy oriented towards price stability on relatively short periods (two years) complemented by a component of micro-prudential supervision (focused on the risk of individual institutions, irrespective of the interconnections between these risk contagion and systemic risk).

The financial crisis and its consequences have proved that price stability is not enough to ensure macroeconomic and financial stability, as there is no prudential framework focused on individual entities.

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The crisis has initiated an extensive process which is still ongoing - the reconfiguration of the conceptual framework of central bank action: on one hand, there is now a broad consensus on the need to develop macro prudential or systemic dimension of the business of banking regulation and supervision; on the other hand, it is called into question the viability of a monetary policy to maintaining price stability in the narrow sense, namely the short term.

The fact that price stability is usually the primary objective of central banks from functioning market economies has long become an axiom. But it is equally true that their mandate has always included ensuring financial stability, even if references are made often in relatively general terms. The reasons are multiple:

- on one hand, there is the concept of financial stability complexity and difficulty of formulating such an objective in explicit terms - it is clear that here there cannot be only one indicator, as ii is in the case of price stability;

- on the other hand, the necessary tasks and tools to maintain financial stability do not belong only to the central bank.

In this context, we are going to analyze in this paper the ability of BNM's monetary policy to maintain the financial stability of Moldova within its objectives and tasks.

Method and hypothesis

Given the fact that economic literature has not yet reached a common consensus on the concept of financial stability, we have decided to use as a basis the definition of financial stability brought by authors of the monograph published within National Institute for Economic Research of Moldova, according to which*: "Financial stability: the condition in which the financial system is when it is able to fulfill specific functions simultaneously, such as to allocate resources efficiently and absorb shocks, avoiding that they have a destructive effect on the real economy or other systems"* (Perciun, 2015,16).

Thus, this definition shows that to achieve its objective of financial stability, the monetary policy must contribute to:

• the increase of the real economy;
• efficient allocation of financial resources
• shock absorption and the reduction of their negative impact.

The central bank carries out its functions through monetary policy instruments at its disposal. But monetary instruments depend on the objectives and the monetary policy regime. By 2006 NBM has followed national currency stability, since 2006 – till present - price stability through monetary targeting until 2008, and then was approved the transition to inflation targeting regime.

In order to achieve the inflation target, the Bank has provided a major tool: open market operations and several auxiliary instruments: standing facilities, required reserves and foreign intervention on the exchange market.

The main instruments through which the National Bank exercises its influence on monetary conditions are the basic interest rate (which follows from the monetary policy regime) and the rate of required reserves (known as fast and powerful effect of its implementation).

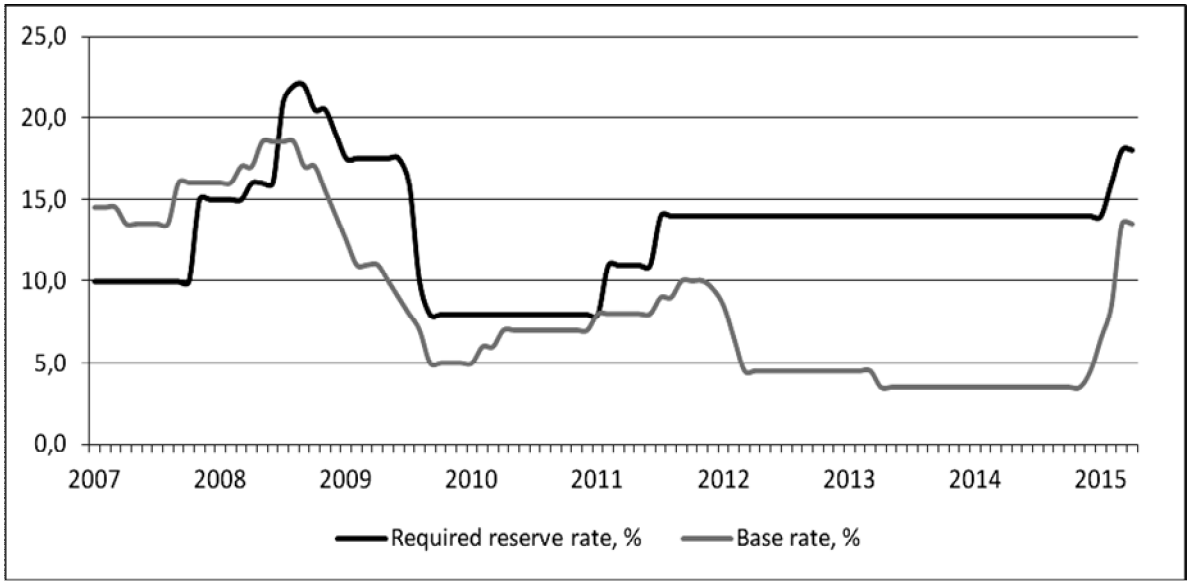

Fig.1. *Evolution of key monetary policy rates in Moldova*
Source: National Bank of Moldova

The evolution of these tools is necessary in order to analyze the central bank's ability to meet the objectives of financial stability previously made. The analysis of the monetary policy instruments shows that in times of increased uncertainty and risks NBM tightened monetary conditions, this is the period of 2008-2009 - when the impact of the international financial crisis began to be felt in the national economy in 2012 and recently at the beginning of 2015 (fig.1).

In the light of these interventions ii is important to check whether the monetary policy promoted by the National Bank carries out its functions through the first concept of financial stability.

Hypothesis testing

1. The first function is - The function of ensuring economic growth.

If you oppose the chart of gross domestic product evolution to development policy rates we can observe that the periods of economic slowdown coincide with the constraint of monetary policy, and is characterized by the increase of the policy rates, while in periods of economic growth the promoted monetary policy is relaxed, creating favourable conditions for economic development.

In this context, we can say that monetary policy through its used instruments fulfils its function of ensuring economic growth. The causes of the economic slowdown coming out of the scope of its duties may be seen in this chart (fig.2):

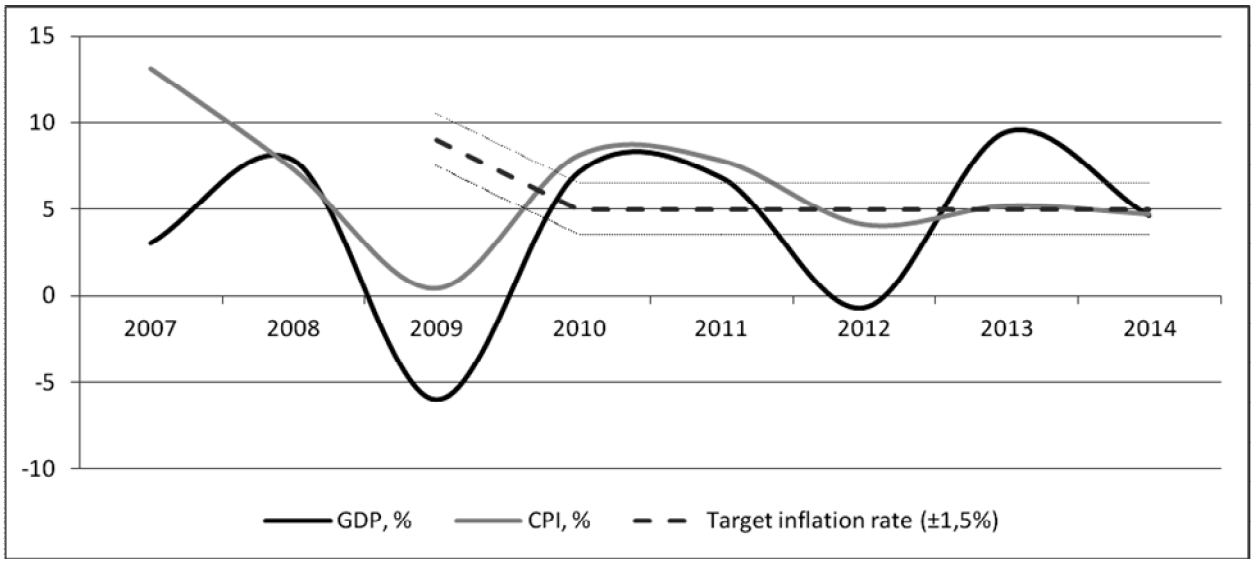

Fig.2. *The main macroeconomic indicators of Moldova.*

Source: National Bank of Moldova

2. The function of efficient allocation of financial resources - is a very important one.

The saturation of the economy with monetary mass volume represents one of the essential functions of the central bank.

Looking at the evolution structure of monetary expansion in the Republic of Moldova (fig.3) we can notice that the percentage of the monetary aggregate M0 - represents that part of the money supply on which the Central Bank can exercise influence (money created and allocated by the Central Bank) retains throughout all the period of time almost the same share in the total money supply. Significant changes are observed more in the behaviour of commercial banks which in times of economic recession, under the influence of risks and uncertainties, constrain their activity of multiplication of money, as well as from the population, who in this period change their preference for keeping savings from national currency into foreign currency, which also can be explained by the increased share of M3 in periods marked by economic recession.

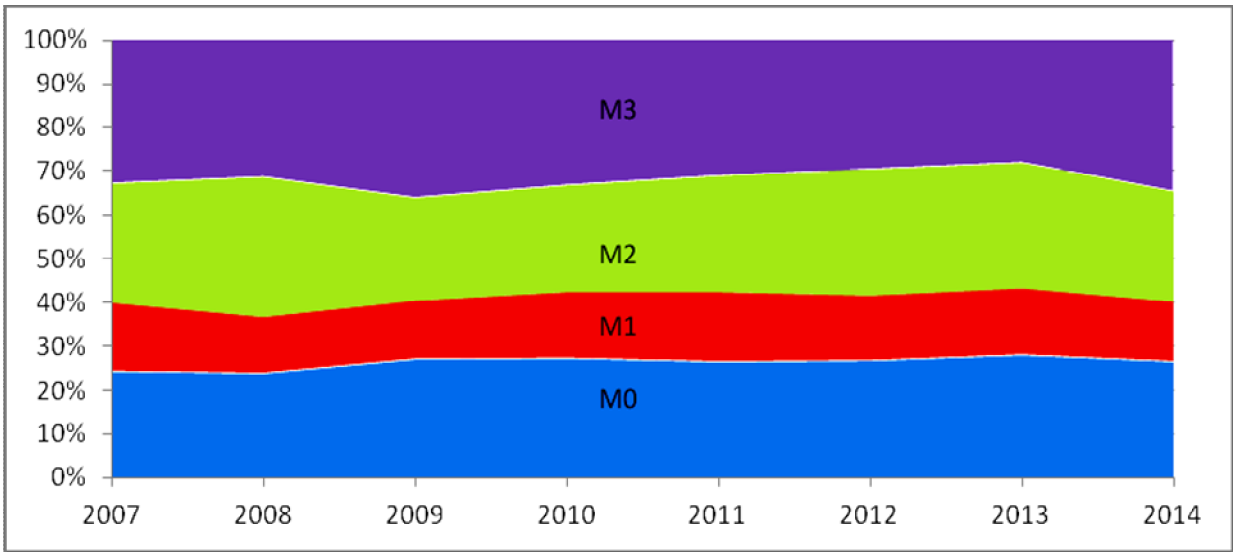

Fig.3. *Broad Money Moldovan in dynamics.*

Source: National Bank of Moldova

This conclusion is confirmed by the graphic evolution of credits in the economy (fig.4). The major interest in this graph is that by 2013 the volume of loans in the economy slightly exceeded monetary system M2 because some of them were funded including on the expense of M3, while in 2013 the balance of credits in economy is lower than the money supply M2. A reduction in lending is due to the slump credibility of borrowers, which required banks to behave more cautiously, maintaining liquidity and not investing in loans.

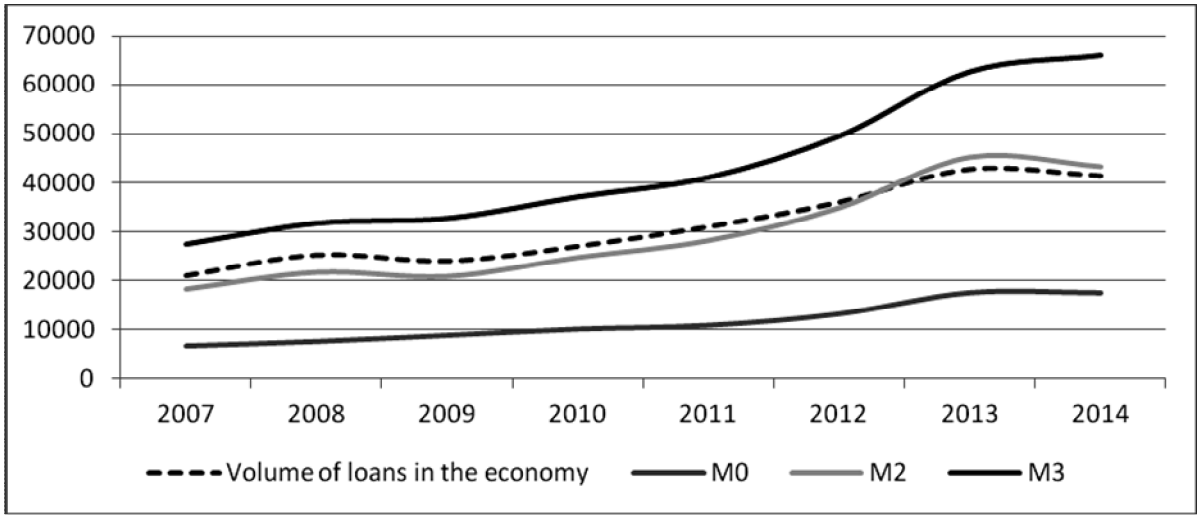

Fig.4. *The evolution of monetary instruments and balance of credits in the Moldovan economy.*

Source: National Bank of Moldova, National Bureau of Statistic of the RM.

The decrease of the ability to absorb the supply of credits in the periods of economic recession is presented in the following chart. This graphic once again proves the responsiveness of the central bank's monetary policy to economic conditions. In the periods of weak demand for currency from the real sector, because of the lack of creditworthy borrowers, the money supply decreases (fig. 5).

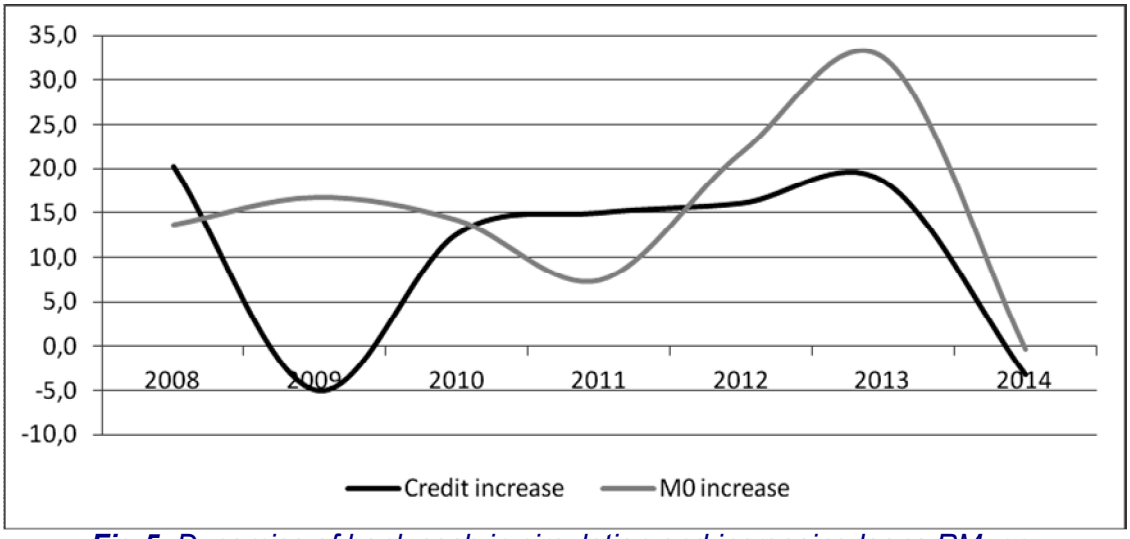

Fig.5. *Dynamics of bank cash in circulation and increasing loans RM, pp.*

Source: National Bank of Moldova, National Bureau of Statistic of the RM.

3. The last but not the least function is Shock-absorbing function and reduction of their negative impact.

Given that Moldova is part of the group of countries with the highest current account deficit, balance of payments that is always negative, invokes the need to protect the exchange rate of the national currency from unpredictable fluctuations, because the debts that should be paid in foreign currency exceed the amounts to be collected, and any devaluation of the national currency will result in a macroeconomic destabilization. It is also known that the prices are not affected by domestic demand of products in the Republic of Moldova, which is very low, but the prices of imported products. Therefore, to maintain the both stability (financial and price) in a country like Moldova, with imported inflation, we must keep the exchange rate stability of the national currency, otherwise any increase in the price of foreign currency will be passed on the CPI.

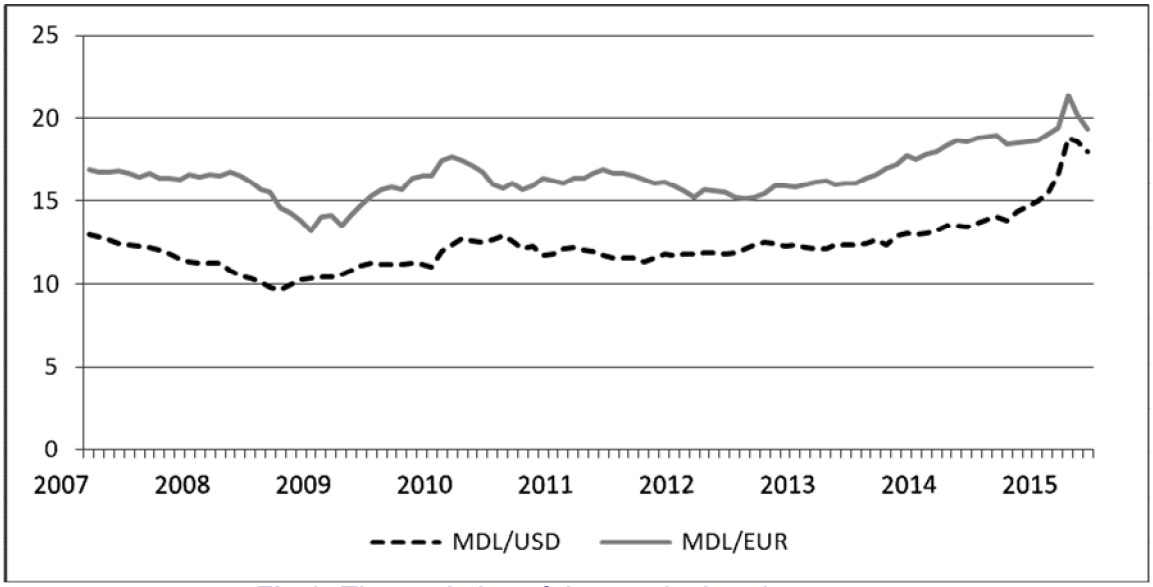

Fig.6. *The evolution of the nominal exchange rate of the national currency against major currencies reference.*

Source: National Bank of Moldova.

From this graphic of evolution of the exchange rate of the national currency can be observed that by tightening the monetary policy of BNM were finally fixed the excessive fluctuations in the

exchange rate (fig. 6). However, taking into account the recent events, we consider that latest monetary policy decisions are greatly delayed, which also brought a great damage to the country's economic stability and welfare.

Premises for intervention existed since the beginning of 2014, which also could protect the economy from the experienced shock rate from the early months of 2015. The reason that there were no pronounced risks to price stability, the great depreciation of MDL against single European currency and the US dollar recorded early in 2014, were not taken into consideration by the monetary authorities.

This situation proves that Moldova changed too early the inflation targeting regime, regardless of the fact that inflation is imported in the country. That is why every time when there is an increase of other currencies and the lowering purchase price of national currency we face the problem of price increase.

Once we import all resources from a strong exchange rate growth (used for international payments) the price increase is immediately carried out on the market - non monetary factor. That is why BNM should aim not only to pursue inflation targeting, but also analize the exchange rate developments until 2006- because only analysing efficiently the exchange rate it becomes possible to carry out its inflation targeting (ex. New Zealand - the first country to introduce inflation targeting as a target of monetary policy and later to review its application by introducing it in the target of the central bank and the evolution of the national currency. This country like Moldova has closed economy which pretty much depends on other imports and in these conditions the exchange rate led to the increase of inflation).

Conclusions

Based on the analysis done in the present article we can conclude that the monetary policy promoted by the NBM over the recorded years fulfilled its functions: the monetary system has sufficient tools to maintain the financial stability of the state, they are applied at their fair value with effect response.

However, in the light of recent events that have disrupted the stability of the country's financial situation we believe that for better absorption of shocks currency it is necessary either to review target monetary policy (adoption of a target mix) or the efficiency of monetary policy decisions by anticipating the risks and adoption of preventive decisions.

Unfortunately the monetary policy remains only a part of the financial policy of the state and it can be noted that the major problems in the financial stability have a different origin than those of monetary factors (at present in Moldova the major problems come from the banking system, due to strong intercorrelations between monetary policy and banking system, while other segments of the financial market remain underdeveloped).

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REGULATION OF INSTITUTIONAL INVESTORS' ACTIVITY IN THE REPUBLIC OF MOLDOVA: PROBLEMS AND NEW CHALLENGES FOR THE DEVELOPMENT OF DOMESTIC CAPITAL MARKET

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Abstract

Legal framework is a key element for the development of the capital market that is why it is important for the regulation body to implement the best practices in order to ease the activity of market participants, but, at the same time, not to affect the secure functioning of the economy. The article analysis the role of the National Commission of Financial Market in regulating the activity of institutional investors on the capital market of Moldova and presents an estimation of the domestic legal and institutional framework from the point of view of main existent problems that negatively influence the activity of institutional investors. Also there are given some recommendations for the development of capital market regulation in the Republic of Moldova.

Keywords: securities market, stock exchange, Policy, Institutional Investors, Financial Intermediaries, joint-stock-company.

JEL classification: G1, G18, G23.

Role of National Commission of Financial Market in regulating the activity of institutional investors

Securities market of Moldova, as well as the activity of institutional investors on the capital market is regulated by the ***National Commission of Financial Market*** (NCFM - is the heiress of National Commission of Securities Market, State Inspectorate for Insurance Supervision, Private Pension Funds', Saving and Credit Association and is based on the new "Law on NCFM nr.129-XVI from 07.06.2007") [3], which is empowered to regulate, supervise and control the securities market and its participants, continuing to achieve its goals and strategies through the development and improvement the legal, administrative and financial framework.

The main purpose that led to the creation of NCFM in Moldova is the necessity of existing of an authority that regulates, authorizes and supervises the non-banking financial market, which therefore includes also the capital market.

The securities market in the Republic of Moldova is composed by primary and secondary market, which is regulated by a set of normative acts, regulations and laws created most of all after the start of privatization process of the state property, especially after 1998: "Law on securities Market", "Law on Joint Stock Companies", "Law on NCFM", "Stock Exchange Rules", "Regulation on dealers' and brokerages' activity", "Regulation on estimating activity and assets referred to them", "Instructions of public offers of securities on secondary market", "Instructions on mode of state registering of securities", "Instructions on reorganization steps of joint stock companies", and other regulations and normative acts [3].

The regulation of primary and secondary market refers to:

- The procedure of underwriting securities;
- The way of registration of securities;

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- The way of performing public offers;
- Determining types of securities that will be registered on Stock Exchange;
- Requirements of registration to Stock Exchange in listing and non-listing;
- Procedures of Stock Exchange transactions;
- General and specific requirements on each activity on securities market;
- Conditions of licensing of professional participants.

NCFM is continuously consolidating its regulation and supervision efforts for the development of a modern capital market, by implementing European directives and other foreign practices, ensuring a strict control of legislation observance.

In order to ensure long-term and continuous development of capital market and its transformation into an efficient instrument of attraction and redistribution of investments, the Parliament of Republic of Moldova adopted ***Law nr. 171 from 11.07.2012 „ On capital market ".***

The law provisions establish the legal basis for regulating relations in the field of capital market. Law rules govern the activities of investment firms, securities, public offerings, takeover bids, the capital market infrastructure, establish disclosure requirements in order to maintain high standards of capital market activity and the creation of conditions for financial investments. The law also stipulates the conditions regulating the licensing of capital market activities, surveillance and investigation activities in the market [1;2].

At the same time, elaboration of new law in the domain of capital market is determined by the following objectives:

- Creation and maintenance of some efficient and transparent markets;
- Reduction of systemic risks;
- Promotion of public bids of securities;
- Connecting categories of activities on the capital market towards European standards;
- Effectiveness of organized trading of financial instruments;
- Ensuring prudential administration and supervision of activities on the capital market;
- Creation of Investments Compensation Fund;
- Prevention and combating market abuse and other activities contrary to law;
- Achievement of a high level of protection of the rights of investors in securities and beneficiaries of financial services in the capital market;
- Defining the powers and functions of the regulatory authority, supervision and control of the capital market [1].

In the context of entry into force of the ***new Law on capital markets***, market actors in leading role banks hope to change many things, in conditions in which the old rules limited the development of the market and there existed many barriers that hindered market intermediaries, as well as issuers of securities.

There is a risk that concomitant activation of two laws (the old and the new ones) during a period of one year and a half could disturb the capital market. During this period there will be elaborated new normative acts that will refer to the new law. So the new law will enter into force, but the rules will not be clear for market participants, that will not impulse the market to advance. In this order of ideas, the capital market regulator should carefully clarify new rules and estimate what will be the impact of measures before their implementation.

There are also opponents of the new law on capital market activity, as they consider this fact as a negative factor for the development of domestic capital market. But the law opponents don't want to recognize one fact: previous legislation was convenient only for some market operators, as it obliged joint stock companies and investors to use their services and to pay for these services. If the situation would not be catastrophic on the market, these privileges could have been omitted. But namely these privileges put on knees, as during 14 years of previous law existing, the market gradually degraded.

Issues and transactions on the capital market were performed because the law obliged market operators to do this. On the contrary, nobody would appeal for these mechanisms. The new last provisions come to exclude privileges for some categories of operators.

The new Law on capital market has as objective adjustment of national legal framework in the domain of capital market regulation towards European Union directives, principles of International

Organization of Securities Commission and implementing the best international practices for the development of national capital market infrastructure, supervision based on estimation of the risk degree, diversification of financial instruments, increasing the level of investors' protection and reducing systemic risks [1]. Law transpose 11 directives related to investment and financial services, including the main European directive applicable to the financial sector - 21.04.2004 Directive nr.2004/39/CE of the European Parliament and of the Council on markets in financial instruments (MiFID).

The law establishes the legal regulatory relations in the capital market, and activities of investment firms, securities, public offerings, takeover bids, capital market infrastructure, information disclosure and market abuse.

The new regulations provide a number of advantages that come with the implementation of a new model to ensure access and trading on the stock market, diversification of *financial instruments and the creation of an appropriate mechanism for the protection of investors.* Among the strengths of the law are noteworthy [4]:

- expanding the spectrum main services and activities that an investment company may undertake. For example, today the companies licensed to conduct the business of a dealer in the securities market are not entitled to lend to customers to carry out transactions with securities and under the Law on the stock market offers the possibility of investment firms will hold category C license;
- issue of licenses for an undetermined maturity, today their validity is for 5 years;
- financial capacity building of local professional participants in the securities market, so that they can develop new products and activity programs, hire adequate staff, develop information infrastructure and new technologies, which also positions them more comfortable in a competitive environment loyal foreign;
- diversification of financial securities subject list being expressly determined and placement procedures for issuing Moldovan depository receipts, fund units issued by collective investment undertakings;
- introducing the possibility of withdrawing securities by the holder of more than 90% of the total voting securities, allowing completion of the consolidation of ownership in many joint stock companies increasing investment attractiveness, these procedures are in accordance with Directive 2004/25 on takeover bids;
- regulation of the multilateral trading system, offers the possibility of creating new platforms for trading of financial instruments;
- irrevocability of transactions since placing the order clearing and settlement systems;
- create prerequisites for the emergence of institutional investors, which can take both legal personality as well as without. Efficient operation of collective investment schemes in securities will allow attracting surplus liquidity from the public capital market, which will help increase the flow of investment that will benefit domestic companies;
- introducing quarterly reporting by public interest entities (currently - 14 commercial banks, 18 insurance companies, 6 joint stock companies other than banks whose securities are listed on a stock exchange listing, and, in the future, companies will securities public place or will conduct business as collective investment in transferable securities or state pension fund), thus ensuring the provision of more information to investors and that a better functioning of the market. These issuers will disclose information in electronic form on their website;
- simplification of trading procedures and making public offers in relation to professional customers (investment firms, commercial banks, insurance companies, organizations of collective placing of securities, pension funds, public authorities, etc.) and qualified investors, categories of persons who possess a high level of knowledge of capital market institutions that are able to decide individually on investments in financial instruments that do not require state protection afforded to small investors.

To provide services to regular customers (depending on knowledge and experience in investing in financial instruments) investment companies will establish, implement and maintain appropriate internal policies and procedures to detect any risk of failure by the company of their obligations to identify situations that generate or may generate conflicts of interest in relation to their customers.

Requirements of compliance, risk management, internal audit, rules of conduct and restrictions on personal transactions are established in order to provide services to investment companies honestly, fairly and professionally to meet the client's interests first. Therefore, there is a shift from

prescriptive model of behavior of professional participants in a model based on the management and supervision.

➢Increasing the attractiveness of securities and the level of investor protection by creating and managing the Investor Compensation Fund, and by improving the transparency requirements to capital market participants.
The law provides the National Commission of Financial Market to issue decisions on the approval status of person accepted for legal persons of the EU Member States authorized to perform investment services and activities and supervised by the competent authorities of the Member States of the European Union, under agreements concluded between authorities and NCFM.

Currently, the legislation does not contain such regulations. Given the comparative maturity of the domestic market and markets of other EU countries, investment firms will be able to take the experience and provide access to foreign financial markets.

Analysis of legal framework in regulating the activity of institutional investors: problems and solutions for the development of the capital market

In Republic of Moldova, the securities market was created not to accomplish its main function – of accumulating capital for realization of investments and its distribution towards investment projects, but with another scope: insurance of privatization program realization of state ownership. Due to the fact that the Regulator's activity and regulation of securities market was not a priority for state authorities, the selective approach led to the fact that ***in Republic of Moldova was created a securities market with a contradictory legal framework for the development opportunities of the capital market.***

The infrastructure of the securities market is very complicated, although is limited in terms of volumes and functionality, and there are created different ***types of participants the activity of which is doubled.*** Normally, market participants could have cumulate actions or types of performed activities. Irrespective the legal framework of other countries, national legal framework provides 13 types of activities [4].

Another fact is characterized by the competence of regulation of some market segments by public bodies. This fact is manifested through ***the tendency of central public body on the securities market to massively imply within processes that occur on the capital market***, which is the practice that is not applied in developed countries and namely consisting in delegating some empowerments to self-regulating bodies, including the ones with normative regulation character.

The consequences of such a continuous implication of the central authorization body in the activity of market participants on the capital market are not favorable, being created ***a too regulated market, in terms of normative framework, with multiple requirements and procedural barriers.***

Another subjective factor consists in undertaking, sometimes totally, of some rules and practices from more advanced countries. This approach is sometimes not correct, as it does not take into considerations country developments' distinctions.

As a comparative example can be taken Romania, where starting from 2002, the capital market was subjected to important new regulations that brought changes in mechanisms and functioning of capital market. These legislative changes were necessary to be implemented within the binding conditions of implementing EU directives and recommendations before adhering to EU. In this order of ideas, the National Commission of Capital Market of Romania implemented, on the one hand, a whole set of European directives, but, on the other hand, took over the European legal model – the global capital market regulation. The new legal framework led to a favorable evolution of the Romanian capital market, and namely:

➢New banks entries on the segment of rendering financial services;
➢Implementing requirements of capital adequacy;
➢Organization of investors' compensation fund;
➢Realizing changes in the activity of mutual funds, which are obliged to insure a more efficient management of resources and to simplify procedures on attraction of investors;

➢Simplifying financing procedures on the capital market.

Considering the decrease of the number of professional participants on the capital market (legal changes led to the possibility of investment funds to reorganize into common joint stock companies), there can be stated another unfavorable phenomenon on the domestic capital market, and namely – ***trend of disappearance of the most active investors, of investment funds and trust management companies***, that resulted in real and irretrievable disappearance of ownership by thousands of minor shareholders.

The capital market of Moldova needs to be subjected to an institutional reform to be unified and consolidates (bank-and non-bank sector) within a unique state authority, with one Regulator - that is the National Commission of Financial Market that would regulate and control the consolidated financial domain (bank, real estate, insurance, microfinance, savings, pensions, investment funds sectors).

The regulation framework, which is costly, inefficient and confuse for the market participants will led to establishment of a unique market regulator with clear objectives and a whole set of coherent competences and efficient functions. Good practices of other countries with one regulator are beneficial to be taken and applied in Republic of Moldova.

It is important to elaborate a complex strategy of capital market development in Moldova, which would in fact be a complex normative reform that would trace distinct efficient development methods, including – basing capital market development concept on norms of populations informing, as well as reestablishing of investors' trust in institutional structures. For a positive e development of capital market, population needs to be informed on the possibilities of active and efficient trading on the secondary capital market. In this case for the capital market development, an advantage would be organization and development of OTC market, and not its exclusion off the capital market. Also, the normative regulation of the objective of fusing the state securities market with corporate securities market would lead towards unification, stabilization and increase of securities market liquidity in Moldova.

The process of securities market should be based on public offerings, principles of offers' competitiveness, bid/ask liabilities that would be clearly fixed. That is why it is important to legally regulate the tangency of interests of managers, on the one side, and shareholders and institutional investors, on the other side.

Normative defining of infrastructure and launching the financial instruments (municipal bonds, futures, options contracts, deposit receipts and other derivatives) for capital market maximization and development, including also trading state securities through National Bank of Moldova should be offered to institutional investors through state programs offered by Regulator and proposed to investors, that would also be guaranteed by international well recognized structures, like EBRD, IMF, WB etc.

This aspect is extremely important, as the insurance of consumers rights of financial services lacks on the domestic capital market, namely in the domain of protection of control package of shareholders in cases of their illicit ownership deprivation (*raiders attacks* - in Republic of Moldova the concept "raider attack" lacks in legal interpretation. A simple definition of this notion would consist in: the process of establishing a full control over a company, both in the physical sense and in the legal sense, against the will of the directors and / or its owners), lack of personal responsibility of members of company's administration council (in case of performing large transactions) and so on.

It is important to reform taxation policy of capital market participants. Taxation policy of financial market should not consist in a simple method of money collection in order to increase state budget. ***The Regulator's normative policy on the financial market should base on the logistics of market taxation starting from economic reality and country objectives with stimulatory factors for institutional investors***. A good example would be: institutional investors having the same activity degree as previous years will pay lower taxes.

Projects of normative acts of the Regulator on taxation policy and the process of taxes' collection should be publicly consulted and approved based on the opinion of market participants: both investors and issuers.

It is necessary to change in Moldova (example, Romanian practice) some provisions in legislation relating to taxation of profits obtained on capital market and introduction of tax grills of revenues on capital market, based on period of securities holding and acquisition/sale prices. This taxation grill should not stimulate speculative transactions. But when considering this higher fee on speculative transactions, it is important to match investors' interests who are searching investment profits and issuing companies who are willing to finance with low costs, as limitation of speculative transactions by a higher fee would result in limitation of issuers' access towards financing resources.

An efficient capital market is a good foundation of accelerated economic growth of once country through a correct regulation framework, including tax regime of attraction mechanisms of capital resources and their distribution towards country financing and development.

The potential of state regulation of capital market should be directed towards:

- Reduction of trading costs for most active institutional investors;
- A financial and investment activity that would ensure efficient revenues;
- Increase of participants' confidence;
- Generation of positive externalities;
- Efficiency of authorization procedures;
- Increase of requirements of information disclosure.

In Moldova a dogmatic concept of regulation in applied on the capital market, due to the following reasons:

- An asymmetric regulation of the domestic capital market is carried out, where some of the segments are excessively supervised and regulated, while other ones not;
- There are applied interdictions and conditionings through which are applied price controls on securities market;
- A distorted role is given to the Moldova Stock Exchange (MSE), where are traded such operations as "Repurchase Agreements (REPOs)", which in fact are not stock exchange transactions;
- Lack of advanced trading technologies.

The foundation of capital market should be based on three pylons – transparency, liberal regulation policies and ensuring investors' trust in financial services and tools offered by capital market operators.

Conclusions

Legal and institutional framework is a key element for the development of the securities market that is why it is important for the regulation body to implement the best practices in order to ease the activity of market participants, but, at the same time, not to affect the secure functioning of the economy.

Recent crisis that have hit the whole global economic system gave lessons for all regulation authorities, that is why it is important not to repeat mistakes undertaken by foreign countries, but create a legal infrastructure that would favor attraction of foreign capital and capital market development.

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INTERNATIONAL ECONOMICS AND FINANCE

RECENT DEVELOPMENTS IN THE STRATEGIES OF THE EUROPEAN MONETARY AUTHORITIES

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Abstract

In the attempt to correct the imbalances in the financial system and sustain economic activity impaired by disturbance of the global financial crisis, central banks, especially those from the developed countries, have expanded the range of monetary instruments by applying unconventional measures. Recent studies noted the short-term beneficial effects of these measures, but also emphasize the existence of their implementation's costs; one of the problems in this context that has yet no solution refers to the way out of "unconventional circle" with minimal cost. Understanding the new environment in which it operates, requires access to more information within a central bank activity and the introduction of new smart statistics information that adds credibility but in the same time supplement the information's novelty. In this article we will focus on achieving fair and suggestive pictures on applied monetary instruments' (prudential, unconventional, and traditional) and banking system's developments.

Keywords: monetary strategies, central banks, European perspective

JEL classification: E52, E58

Introduction

One of the fundamental lessons of the global financial crisis is that the financial stability cannot be treated only in the components of the financial system, ignoring the historical tendency of the system to oscillate between periods of effervescence and decline. Therefore, macroprudential policy is an important pillar in the strategy formulation for a central bank, however non-standard policies, institutional factors, and the role of geopolitical groups may be considered.

Central bank's activity has been the subject to constant challenges that have imposed the need to redefine its role in managing the financial instability. The latest such challenge (the global financial crisis), which meant the outlet of Great Moderates, led the monetary authority rethinking the way of approaching the goal of financial stability (Criste and Lupu, 2014), including the extension of the range of instruments used by the monetary authority. In this framework of extending the range of instruments used by central bank encompasses the issue of applying unconventional policies, those measures applied in order to supplement the standard tools of monetary policy that are "exhausted" by their intensive use during the global financial crisis.

Some empirical studies analyses the typology of non-standard measures, the characteristics framework for implementing these measures (Borio and Disyatat, 2009; Cecioni et al., 2011), other studies describe the impact of non-standard measures at the macroeconomic level (Lenz et al, 2010; IMF, 2013) or investigate challenges posed by unconventional measures (Shirai, 2014), but also limits of their application (Peersman, 2013). As remarked Yellen (2014), some countries, such as Canada, Switzerland, the United Kingdom, have tried to use monetary policy as a tool for promoting financial stability, under "special" conditions by applying unconventional instruments, but eventually they concluded that macro-prudential policy should be the core instrument of financial stability.

Claessens (2014) notes that ensuring secure and stable financial institutions is not a sufficient condition to ensure the stability of the financial system as a whole, requiring a rethinking of policy for financial stability by filling the field with a systemic approach. Borio (2003), Borio and White

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(2003), White (2006) stressed even before the crisis the need for a macro-prudential approach to financial system, with two categories of tools: the soft type (communication and market discipline) and hard type (higher capital requirements). These concern both strengthening the financial system and reduce the accumulation of systemic risks. Schoenmaker (2011) and Obstfeld (2014) draw attention to the financial manifestation of the so-called financial trilemma, resuming the ideas set out even before the financial crisis by Thygesen (2003) and Schoenmaker (2005). They raise the (im)possibility of managing the financial stability under an integrated financial market functioning and with a financial supervisory policy at national level, the idea which is confirmed by the reconfiguration of the financial stability framework in the euro area.

Problem description and the approach

The global financial crisis considered a manifestation of the financial instability changed the operating framework of the monetary authorities. Constrained by the new challenges, they have extended the range of monetary policy instruments and tried to redefine their role in the financial system. On the one hand, some central banks have used mostly unconventional monetary policy measures, other focused mainly on the implementation of macro-prudential measures. The literature considers the problem of the relationship between the type of economy (developed and emerging) and inclination to use macroprudential policies, pointing out that emerging countries have a longer history in their use. On the other hand, the challenges posed by the global financial crisis led to a growing interest of the monetary authorities from developed countries to enforce these measures in terms of financial instability.

In their attempt to correct the imbalances in the financial system and sustain the economic activity affected by disturbance of the global financial crisis, the central banks, especially those from developed countries, have reduced more or less aggressively the interest policy rate, reaching their lower limit (zero lower bound). In this setting of monetary policy, the monetary authorities have expanded the range of instruments through the use of unconventional measures. Recent studies noted the beneficial effects of these measures in the short term, but points to the existence of their implementation costs (Williams, 2014). One of the issues arising in this context and which has not been found yet a solution refers to the modality of finding a way out from the "unconventional circle" with minimum cost.

Understanding the new operating environment in which monetary authorities ask the access to more information within a central bank activity and the introduction of new "smart" information that may ad credibility but also supplement the information novelty. The focus is on getting an accurate and suggestive image about the evolution of the applied monetary instruments (prudential unconventional, traditional) and of the banking system.

Besides the series of viewpoints and open problems in this area, there are a number of controversies: unconventional policy (quantitative easing or negative real interest rates, under the inflation rate) vs. conventional policy (traditional); customize the economic problems by countries (issues concerning internal and external balance, public debt, the usefulness of negative interest rates, aging population, the financial structure of savings etc.); monetary policy as economies' recover solution (instead of structural reforms); preserving the independence and fair treatment for all market participants in the event of disturbance (e.g. excessive change for the exchange rate for a currency); price stability vs. financial stability; economic cycle vs. financial cycle; regulation-deregulation in the financial system; regulated banking system vs. shadow banking system and banking intermediation prospects.

There are numerous studies that deal with the way in which central banks have changed their strategy after the financial crisis outbreak, but they take into account especially those monetary authorities systemically important (Fed, Bank of England, European Central Bank, etc.). In this study, however, we intend to identify the reactions of European central banks from emerging countries after the global financial crisis outbreak and the extent to which these monetary authorities have applied special instruments during this period. To this end, we selected several central banks (from Bulgaria, Estonia, Lithuania, Latvia, Czech Republic, Poland, Romania and Hungary), whose reactions were interpreted on the basis of annual reports, for 2008-2012 period (considered the period of global financial crisis manifestation).

The analysis sought to highlight the type of tools used in managing the financial crisis:

- anticyclical instruments (AIC) - those that correct the trends in the financial markets (changes in the monetary policy rate, the rate of minimum reserves, sterilization operations/absorption, liquidity injection, etc.). These instruments regard the sense of the longer-term financial flows (periods of risks accumulation);

- financial infrastructure consolidation tools (FICT) - aimed at improving the structure of the financial system;

- communication tools and expectations formation tools (CTET).

We chose a regrouping of the tools used by the central bank in this period according to the objective pursued, and not the already classic conventional-unconventional-macroprudential grouping.

Results

The results obtained from the analysis of information and after grouping them based on the described model were synthesized in Table 1.

Table 1

The instruments used by the analysed central banks, depending on the purpose

Central banks' attitude	National Banks from:							
	Bulgaria	**Estonia**	**Latvia**	**Lithuania**	**Czech**	**Poland**	**Romania**	**Hungary**
AIC								
FICT								
CTET								

Source: Authors' representation based on 2008-2012 annual reports of selected central banks

Note: The fields marked with grey shows the predominance of those instruments

The attitude of the Bulgarian National Bank is both offensive (observed by the predominance of "countercyclical" instruments for counteracting the tendencies) and defensive (to strengthen the financial system infrastructure), being the only one of the eight central banks that focuses on both instruments.

National Banks of Estonia and Lithuania have also joint conducts, applying tools to strengthen the financial system infrastructure, and tools for communicating with the public, this tool being one of the most effective when the central bank is limited by the currency board strategy. After 2008, the prevailing instruments for the National Bank of Latvia are of the offensive type, which is explained by larger and more pronounced challenges Latvia's economy has faced after the occurrence of the global financial crisis.

It is interesting to note that banks having as a strategy the inflation targeting (National Banks of Poland, Hungary and Romania) had the same attitude to strengthen the financial system infrastructure, but this has been intensified by the monetary authority from Hungary. Czech National Bank, although it has the same monetary policy strategy, has focused this time on the application of communication tools, a type of instruments that rely on advanced techniques of financial research. For example, starting with 2008 the Bank produced the Czech interest rate path forecast, and from 2009 published the forecasted evolution of exchange rate of national currency against the euro. Communicative attitude shows in the case of the Czech National Bank the existence of a

consolidated communications infrastructure at the bank, but also a high credibility of this monetary authority.

Conclusions

The picture of instruments used by central banks after the global financial crisis is quite varied, but one can notice a tendency to use instruments that strengthen the financial system's ability to withstand shocks. Communicative prevailing attitude is also observed with the Czech National Bank, but also for the National Banks of Estonia and Lithuania. If in the case of the latter trend is determined by the existence of a not wide set of available instruments at the disposal of the central bank to intervene on the structure of the financial system and to counter the trends of financial flows (due to limits imposed by currency board strategy) in case of the Czech National Bank the preference for this attitude is reinforced by the existence of a communication infrastructure at the central bank, but also by the high credibility of this monetary authority.

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THE ROLE OF POLISH MINORITY AT THE ECONOMIC MODERNIZATION OF ROMANIA

Emilian M. DOBRESCU [58]

Abstract

The Poles had over time a special historical lineage, sui generis with us, Romanians. In the Middle Ages, Romanian countries were historically the cradle of crafts Polish and trade flourished. Then, in the modern and contemporary period, the Polish state has been based on the Romanian state to cope and succeed despite the vicissitudes of history. For a quarter century we see a revival of Polish-Romanian relations based on historical truth, traditions and customs, mutual respect in all actions.

Keywords: polish minority, economic development, romanian economy

JEL classification: B00, J10, N00

Introduction

Polish people presence in the economy of the romanian countries, in XIII century and seventeenth century

Contacts between the polish and romanians, dating back to the mid-XIII centuries - in Transylvania and XIV - when it was founded Principality of Moldavia and land annexed by the Polish king Casimir Ariciului of III the Great (1333-1370) . When was built many places of worship in the Transylvanian city of Bistrita, Sic, Unguraş was attended also the Polish masons and craftsmen. Neighbouring led to the establishment of intense political, economic and cultural relations between the Polish and Moldavia, and Transylvania, which will be strengthened with links naturally and family blood relationships [Wikipedia, 2015, Polonezii din Romania].

At stake was controlling the main trade routes that crossed the Europe from north to south and connected the Baltic to the Black Sea and further the Mediterranean Sea. Thus, grain and cloth Polish were arrived at Brusa, Constantinople and Pera. At the same time, that trade route from Lviv was intersected with other important trade route which linked East and West. There were thus two trade routes - "Moldovan şleahul" who went about Moldova along the Prut River to White Castle (Akerman) and "Tartar şleahul".

In their policy to limit the influence of Hungarian, the Moldavian princes, were oriented from the outset towards Poland.They granted to Polish nobles broad privileges, allowing them to open trade houses in major cities in which to sell goods. Sometimes, were offered the Poles nobles, the estates into territories of Moldova. The Roman Voda, son of Ilyas, he gave Buczacki Dietrich, the noble Cameniţei and Podolia, several villages for his help offered for coming up in the throne. On these estates was working also Polish peasants, many of them escaped by other feudal estates.

After the first divided of Poland in 1772, many Poles came to Moldova, but their migration was stopped by the Austrian authorities. The discovery of salt deposits led to open mines in Solca (1784), Cacica (1785), and then from Slatina Mare, Slătioara, Trestioara, Pleşa etc. In 1792, after he inaugurated the great exploitation of Cacica, Austrian authorities bring here 20 families of Polish, miners experienced connoisseurs of the characteristic of such operations. The settlement grew quickly in 1810 reached 305 souls, and eight years later became a village almost entirely Polish - the school where it is taught in four languages: Polish, Romanian, German and Ukrainian. Besides school, an important role in the lives of people in Cacica played church, built between 1807-1810 by Father Jakub efforts Bogdanowicz priest employee of the mine.

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The Muntenian Polish, natives of Beskizii Silesian,was built in Bucovina the compact settlements, first in the region Cadca in Slovakia, where, because heavy conditions, have resettled since 1803, Chernivtsi, district Caliceanca, then Cacica, Siret and Stara Huta. In 1834, 30 families of Polish muntenian, originally from Hliboca founded a new village Soloneţul. Two years later, Poles have migrated south from Caliceanca where founded the village Pleşa. To them, were added those people from Terebleşti and Stara Huta. In 1842, others Polish people from Terebleşti and Stara Huta, founded together with about 30 families Germans from Sudeten, a settlement named Little Opening. Generally speaking,the role of these migrations was to populate the abandoned popular areas by Romanian, but also decongest overcrowded settlements. The moved people,has received by 30 acres land and enjoyed tax exemption for 10 years. The thirst for land, however, was so great that it led to the dispersal of Poles in several zone.

Description of the problem

The Polish presence in the Romanian economy in the nineteenth century and the twentieth century.

After was made the defeating Tadeusz Kosciusko insurrection in 1794 followed by the third divided of Poland, in 1795, many Poles have gone in Moldova and the Romanian Country, following the call, "Who loves his homeland go to Wallachia". A new wave of immigrants occurred in the nineteenth century, after the suppression of the Polish uprising in November 1830. The national strongest Polish emigration was concentrated in Moldova. Romania was considered "the most friendly and favorable territory." Through the Polish supporter is included also the Prince Alexandru Ioan Cuza, who gladly sign the orders appointing their in the important functions. His current doctor, was a doctor from Krakow, Feliks Gluck and executive - a naturalized Polish, Nicolai Pisotki.

World War II, began with the occupation of Poland and the largest wave of emigration Polish Romania: the figure was around 70,000 refugees persons according to some sources, and after another 100,000. On this occasion they founded numerous professional associations, meeting the Union of Poles in Romania, which at December 19, 1939, transformed in the Union of Poles in Romania.

Polish Communities at the beginning of the century and millennium

The Polish community is widespread in the north, mainly in Suceava county. 15 804 people of Polish ethnicity were recorded in the 1930 census.

According to the National Commission for Statistics, in 1992, 4247 Poles living in Romania (representing 0.02% of the population); most lived in Suceava (2778) and Bucharest (355), Hunedoara County (248) and Timis (107). The leadership of the Union of Poles of Romania "Dom Polski" declared that the ethnic Poles number is higher, about 10,000 people, but for various reasons, some of them declare themselves of Romanian nationality. According to the census of March 2002, 3.559 citizens of Polish ethnicity lived in Romania, of which 2,609 in Suceava.

The most representative Polish communities are meet especially in Moldavia, in Suceava County, in Cacica, Chernivtsi, Caliceanca, Tereblecea, Soloneţul New Plera, Poiana Small, Vicşani (Ruda) Păltineasa and Mill (Bulai).

Union of Poles in Romania was established on 16 March 1990 with the name of Union of Poles in Romania in Bucharest "Dom Polski" the initiative of a group of Poles in Bucharest. Currently the organization has 15 local associations.

On May 20, 1990 was established and the Association of Poles in Suceava. Its president was Rojowski Antoni, who has worked since before the Second World War, in the Relief Association Polish Brothers and Library, established in 1903 in Suceava.

The Union of Poles is the only organization of Poles in Romania. It includes Polish communities in Bucovina, Suceava County villages, and Poles in the land, organized in associations working in big cities. The Union work is mainly to preserve, traditions and culture, learning the Polish language, maintaining links with Poland and shown concern for Polish communities in Romania.

Conclusions

The destinies of Poles in Romania faithfully reflect the history of the Romanian and Polish peoples, as the relations established between them over time [Petrica Ion,2014,p.1].

The Poles had ,over time, a special historical lineage, sui generis with us, Romanians. In the Middle Ages, Romanian countries was a historic swing where the crafts and trade made by Poland was flourished. Then, in the modern and contemporary period, the Polish state was based on the Romanian state to cope and succeed with growth in the vicissitudes of history. For a quarter century we see a revival of the Polish-Romanian relations based on historical truth, traditions and customs, mutual respect in all actions. Like other minorities case, is a lack of studies to assess the contribution of the Polish minority in Romania's economic development.

Prominent Poles IN ROMANIA

- In alphabetical order -

1. Tadeusz Aidukiewicz painter, has works at the Art Museum of Romania.

2. Josef Bem, general participant in the revolution of 1848-1849, leader of the Hungarian army against the Habsburg and Tsarist.

3. H. Dąbrowski, General Mayor of Bucharest (1940-1942).

4. Kond Dombrowski, a painter, has works at the Art Museum of Romania.

5. Władysław Dunin, an engineer and journalist.

6. George Duzincovici, historian, professor at the Institute of Polish Southeastern Europe, an official at the Romanian Academy contributor to Polish and Romanian historical journals in the second half of the twentieth century.

7. A. Fialkowski, owner of the famous cafés in the National Theatre Square in Iasi.

8. Theophilus Glück, personal physician of Prince AI Cuza.

9. Izydor Kopernicki, strîlucit anthropologist named in 1866 director of the Museum of Anatomy attached Colţea Hospital, was awarded the gold medal "Bene Merenti" the Romanian Ministry of Education.

10. Julian Lukaszewski, senior doctor at the hospital in Paşcani, founded in 1866 Mihăileni first Polish library in Romania.

11. Fred Micos, illustrator and painter, painted the Catholic churches in Suceava, Siret Boian, New Soloneţu participated in 74 group exhibitions worldwide.

12. Andrei Ostop, sculptor.

13. Gustav Otremba (from 1833 to 1891), is the head physician of the body colonel rank fourth Romanian Army participates actively in the Romanian War of Independence (1877-78) and was president of the Society of Physicians and Naturalists of Iasi (1887 -1891); It was also a talented composer and - a compound with Eduard Caudella, music operetta "Oltenca". It was among the doctors who had consulted on Mihai Eminescu in Iasi on July 14, 1887.

14. Niculai Pisotki, Romanian army colonel, adjutant of Prince AI Cuza.

15. Teodor Rogalski, musician

16. Roll-Piekarski Witold (1857-1909), professor of drawing at Slatina and Targu Jiu, cartoonist and caricaturist unsurpassed appreciated the Romanian Encyclopedia 1904 as "the greatest caricaturist of Romania". He participated in the founding of Gorj County Museum and was Director of the School of toys Novaci (Gorj).

17. Octavian Smigelski, painter, with works from the Brukenthal Museum, the Art Museum in Bucharest, Cluj, Budapest, painted churches in the county. Alba, Bistrita and Timis County

18. Ferdynand M. Twornikiewicz, founder and editor of Poland "Wiarus".

19. Jan Zalplachta-Zapołowicz, entrepreneur, 1863 Polish insurrection participant, founder of the Association of Unions of Poles (Towarzystwo Wzaemnej Pomocy Polakow).

20. Jan Zaplachta, physician, active member of the "Circle Poland" ("Koto Polski") in Bucharest.

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AFRICA – A CONTINENT IN TRANSFORMATION

Edith Mihaela DOBRE [59]

Abstract:
Africa is a continent wonderful with natural riches, a fascinating history and a population, still insufficiently known, appreciated and valued, which has changed considerably in the last 5-6 decades, when most countries this continent gained their political independence somehow.The changes in Africa are summarized formulated and implemented from the different perspectives on the evolution of this continent. The study identifies these different perspectives and emphasizes the need for new work assumptions in economic plan concerning future of the African continent.

Keywords: French perspective about Africa, Chinese perspective about Africa, The demographic transition

JEL classification: B10, N97,R11

Introduction

As area, Africa has about 30 million square kilometers, is the second in the world after Asia; Africa represents 1/5 of the surface of the total land area surface. Sahara is the largest desert in the world, and together with other two deserts - the Kalahari and Namib - formed the largest desert areas on Earth, after the Australian continent. Africa is a huge continent, after Asia and America, with straight sides generally with little peninsulas and islands; It is the only continent symmetrically disposed equator, hence the climate is the warmest compared to other continents of the Earth - ¾ of the area of Africa is arranged between the two tropics of Cancer and Capricorn north, south.

In Africa, 54 countries are geographically located in the 189 of the planet and an autonomous territory (not self-governing), the Western Sahara. In the eighteenth century and the nineteenth century, during the colonial period in Africa were about 10,000 state and colonial possessions (territories) different. Africa is a vast land area of the planet where - through scientific research - have been identified as homo habilis appeared first.

In Africa, about 1.4 billion people living in the planet's 7 billion (this represents 20% of the total), and demographers estimate that their number will double in about 30 years. A quarter of the approximately 9,000 languages on the planet are spoken in Africa, the most widely used languages are: Arabic (spoken by about 200 million people), English (150 million), French (135 millions) Swahili (120m), Portuguese (40 million) and Spanish (30 million). Approximately half of the population of Africa is illiterate. People connected to the Internet, usually all of the white population, are less numerous than in any big city on the planet developed.

Description of the problem

Unique curiosity of Africa

Africa holds 30% of the existing mineral resources on Earth, the continent with the largest mineral deposit in the world. Nigeria is the fourth largest oil exporter in the world and the largest oil producer in Africa, with about 2.2 million barrels produced every day. The top 10 largest oil producers in Africa consists of: Nigeria, Algeria, Angola, Libya, Egypt, Sudan, Equatorial Guinea, Republic of Congo, Gabon and South Africa. Africa has the largest reserves of precious metals, with over 40% of gold reserves, over 60% of cobalt and 90% of platinum reserves on the planet.

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Republic of Congo, Gabon and South Africa. Africa has the largest reserves of precious metals, deţinându over 40% of gold reserves, over 60% of cobalt and 90% of platinum reserves on the planet

Over 90% of the continent's soils are unsuitable for agriculture and only 0.25% have a moderate to low potential for crop production. Rainfall variability is very high - from 0 mm / year in the Sahara to 9,500 mm / year near Mount Cameroon. More than 250 million Africans suffer from chronic malnutrition. Although the continent is the richest hydropower potential in the world (holding 40% of the world total), water scarcity has in Africa impacts of the lives of over 300 million Africans, of which 75% rely on groundwater as their main source of Drinkable water. Global warming only exacerbates the situation. Limited groundwater reserves represent only 15% of the total renewable water resources. The new findings groundwater in large sedimentary basins in Libya, Algeria and Chad may not be enough to quench the thirst constant growth in Africa in the coming decades.

Six of the top 10 countries with the largest annual net loss of forest area are African. Existing forests in Africa are shrinking annually by about 40 square kilometers; countries with the largest losses are the countries that hold the largest wooded areas, such as Gabon and Democratic Republic of Congo. Over 1,270 large dams were built along rivers on the continent. Lake Victoria is the largest lake in Africa and the second largest freshwater lake in the world after Lake Baikal in Asia. Africa burn more biomass on the globe produces only about 4% of all carbon dioxide emissions worldwide. Africa has eight of the 11 major natural habitats and largest populations remaining lions, elephants, rhinos, cheetahs, hyenas, leopards and hundreds of other species.

Riches of Africa

Petrol. Oil reserves held by Mali, discovered in 1970, have in recent years attracted a large number of Westerners stole. Not long ago, it was discovered at a depth of 107 meters, a huge reservoir of gas at Bourakebougou, just 60 km from the capital Bamako. It is one of the major gas fields, as Petrom oil company representatives announced in Canada.

Gold. Mali is the third largest gold producer in Africa, currently seven mining fields, including Kalana and Morila in the South, Yatela, Sadiola and Loulo in western and Tabakoto and Syama - mines that have recently resumed production.

Uranium. The exploitation of uranium is now made by several Western companies. The most important deposit of uranium currently being explored by a Canadian company is the mining area Fale (150 sq km), estimated at 5,000 tons Equally important is the deposit of Kidal in the north-east of the country (19,930 sq km) which holds about 200 tonnes.

Diamonds. Africa holds 45% of deposits of diamonds and Mali has huge potential for the development of the exploitation of those gems. The Kayes region there is a diamond mine, and Sikasso region in the south, were discovered such gems.

The deposits of bauxite, iron, magnesium, tin and copper are also known. According to estimates, Mali has over two million tonnes of iron reserves and the bauxite exceed 1.2 million tonnes.

Essential elements of African History

Africa is one of the 7 continents of the Earth, inhabited since ancient times. The cradle of human civilization today, was Africa. After one of the most important books on African history - Atlas of the peoples from Africa - African territory was inhabited for the most part of it: the Nile Valley, Ethiopia, Maghreb, West Africa, the old Bantu Africa, Madagascar and the islands. After Jean Sellier, behold main stages of the history of this important part of Africa:

- Nile Valley: a) Egypt - from the Arabs to the Ottomans; Mehmet Ali mastering the British; the years 1350 and 1700; the slave trade; road to independence; b) Sudan - fungilor time; Turkish-Egyptian regime; mahdist State; Anglo-Egyptian condominium; Sudan after 1956; populations in Sudan;

- Ethiopia and its neighbors: a) old Ethiopia: Aksum dynasty Zague; The golden age of Solomon's dynasty and problems of this dynasty; It was Main Tewodros Yohannes II and IV; b) Somalia until the nineteenth century; c) northeast Africa in the twentieth century: the Grand Ethiopian colonial powers; colonies to 1936; Ethiopian war and its aftermath; Contemporary Ethiopia; Ethiopian peoples; Eritreaa, Djibouti, Somalia;

- Maghreb: Berbers, Carthaginians, Romans; a) Muslim empires: the Islamization Maghreb; Fatimid era; Almoravizii and Almohads; new Berber kingdoms; regenţele (paşalâcurile) from Algiers, Tunis and Tripoli; Morocco XVI century until 1912; b) Maghreb since the nineteenth century: French Algeria; Algeria's war for independence; Contemporary Algeria; Tunisia during the protectorate; Contemporary Morocco; Western Sahara issue; Mauritania;

- West Africa: a) savanna Western nations: Ghana and expansion of the Mande people; Mali Empire; Songhai Empire; Mande lands in the eighteenth century to the nineteenth century; voltaic peoples; wolofii and their neighbors; peulii; Weather jihad sites; b) the central savanna peoples: Hausa people up in the eighteenth century; Sokoto Caliphate of; Kanem Bornu and; Ouddie; c) forest peoples: Yoruba; Edo people; Ibo and their neighbors; Fon and Ewe peoples; akanii; Upper Guinean people;

- West Africa in the nineteenth century: a) the colonial period: the race for colonies (1883-1898); conclusion of conquest; French West Africa; British colonial policy; b) contemporary West Africa: Senegal; Gambia; Cape Verde Islands; Guinea-Bissau; Guinea; Sierra Leone; Liberia; Mali; Burkina Faso; Ivory Coast; Ghana; Togo; Benin; Niger: Chad; Nigeria;

- Old Bantu Africa: a) Central Africa: Adamawa-speaking peoples ubanguiene; Bantu populations in the Gulf of Guinea; peoples of the Congo; peoples of the southern savannah; b) East Africa: Great Lakes region; peoples of the plateau; Swahili world; Sultanate of Zanzibar; c) Southern Africa: Zambezi river borders; Khoisan and Bantu populations of the South; zuluşii and weather disturbances; Zambezi river land in the nineteenth century;

- Bantu Africa since the nineteenth century: a) colonial Central Africa: competition for Congo; French Equatorial Africa; Colonial Cameroon; Congo Free State; Belgian Congo; b) contemporary Central Africa: Cameroon; Equatorial Guinea; Sao Tome and Principe; Gabon; Congo-Brazzaville; Central African Republic; Congo-Kinshasa; c) colonial East Africa; d) contemporary East Africa: Kenya; Uganda; Tanzania; Rwanda; Burundi; e) colonial Southern Africa: Boers and the Cape Colony; British expansion; Boer War and the formation of the Union of South Africa; South West Africa; Rhodesia and Nyassaland; Angola and Mozambique; f) contemporary Southern Africa: Angola; Zambia; Zimbabwe; Malawi; Mozambique; Botswana; Namibia; Swaziland; Lesotho; South Africa;

- Madagascar and the islands of Malagasy; colonial period; Madagascar since 1960; Comoros; Mayotte; Reunion; Seychelles.

A informed reader, might notice that throughout history, all these parts and bits of the African continent amounted your real regional growth poles or local.

African demographic transition

Speaking about the population Afro-Asian which occupy northern and northeastern continentului. Could be distinguished four main groups: 1. Egyptian (ancient Egyptian language); 2. Berber (throughout North Africa, in western Egypt and the Atlantic Ocean); 3. kuşitic (massif of Ethiopia and the Horn of Africa) and Chadiac 4. (west of Lake Chad).

Expanding the demographic Before Christ (BC)

It seems that the Congolese populations nigero has as swing training the headwaters of the region of Senegal and the Niger rivers. From what is known, the nigerian people which are language-speaking nigero-congolese, population of the current Congo, were arrived Cameroon during II millennium BC.

Migration has continued gradually to the east and then southeast to turn into a major process: expansion of Bantu population by three horizons: Central Africa, Eastern and Austria.

Some of them have spread to the northern edge of the rain forest and arrived in the Great Lakes region in the late first millennium BC, if not earlier. The expansion appears to have followed both exterior forest watercourse: Bantu tribes came down the right side tributaries of the Congo River, then climbed it and its tributaries from the left to reach the savannahs south of the forest. From

East Africa region and then continued southward extension: Bantu populations have thus reached the south of the Zambezi in the fourth century AD, and in the next century south of the Limpopo. Arabs occupied northeastern Africa (Egypt), many thousands of years before Christ. Funjii occupied Sudan and the Ethiopian Jews occupied Ethiopia.

Expanding and demographic transition After Christ

Similarly, the population demographics Bantu expansion in the south and southeast of the African continent before Christ, began and unfolded demographic expansion of other populations in other parts of the African continent after the birth of Christ, thus:

- Arab population in Egypt and North Africa; Turkish people - all in North Africa (Egypt, Libya, Tunisia, Morocco and Algeria today);

- Population Ghana and Mali mandate; Hausa population in the central African savannah; Akan peoples, Edo, Ibo, Fon and Ewe in the central African; Somalia East Africa, Somalia; Boers in South Africa;

- European nations were the colonies in African countries: Egypt English and Africa South; French in Algeria, Morocco and Tunisia and oocidentală coast of Africa; Italians in Ethiopia; Portuguese, Dutch and Spanish - on the western coast of Africa etc.

The demographic transition experienced special issues during the colonial period of Africa, centuries XIX and XXI th. Do not forget that here, have gone, being sold into slavery, tens of thousands of blacks who recolumned then the southern United States, but also the islands of archipelagos US: Greater Antilles and Lesser, Dominica, San Salvador or northern South America (Guyana British , French Guiana etc.).

Africa was not only the "Cradle of Humankind" where was signaling the first people in here like Homo habilis and Homo Sapiens, but also the demographic source for the North American continent and numerical expansion - unprecedented in the twentieth century - world population. In late 2007, the world population was 6.6 billion people, of which more than half live in Asia (60%).

The Asian Continent was 5 times more populous than the African Continent, 6 times more populous than Europe, 7 times more populous than Latin America.

China alone, has the number of people meet as two whole continents (Africa and Europe), and India as the Americas and Japan combined. The total population of Africa, 1/3 is found in three countries: Nigeria, Egypt and Ethiopia. In Africa, the demographic transition has its specificity: Maghreb population has multiplied 5 times, from 11.5 million in 1900 to 60 million in 2007, and in West Africa 7 times, from 27 million 216.9 million in the same period. The population of the former colonies became much larger than the old metropolis.

Among the most populous 10 countries of the world in 2006, only one - Nigeria - was on the African continent and in 2050, according to forecasts still one African country - the Democratic Republic of Congo will be from this continent (see table below):

2006		2050	
State	*Population (millions)*	*State*	*Population (millions)*
China	1311	India	1628
India	1122	China	1437
S.U.A.	299	SUA	420
Indonesia	225	Nigeria	299
Brasilia	187	Pakistan	295
Pakistan	166	Indonesia	285
Bangladesh	147	Brasilia	260
Russia	142	Bangladesh	231
Nigeria	135	Rep. Dem. Congo	183
Japan	128	Ethiopia	145

Source: The World Almanac and Book of Facts, 2007

"In Africa there are now 1.2 billion people, and projections show that in 20 years their number will reach 2.4 billion. They need to eat, to dress, to sleep," said the businessman Ovidiu Tender Forbes 500 billionaires launch on October 25, 2013

France's Optics in his relations with Africa

14 African countries - Benin, Burkina Faso, Guinea Bissau, Ivory Coast, Mali, Niger, Senegal, Togo, Cameroon, Central African Republic, Chad, Congo, Equatorial Guinea and Gabon - are still forced to pay France t axes colonial .

When France sent troops to Africa in 2013, which has interests in oil, gas, gold, uranium, diamonds and ferrous minerals with EU and NATO endorsement, nobody revolted. France's military intervention in Africa. supported in the diplomatic field by other European countries and of course the US, was for riches, these was the objective for french side.

The largest military bases that France holds in Africa is Djibouti (Ethiopia), on the island of La Réunion in eastern Madagascar, Dakar (Senegal) and Libreville (Gabon). France also has operational bases at Bangui (Central African Republic), Abidjan (Ivory Coast) and N'Djamena (Chad).

In Chad, N'Djamena, France has stationed 1,200 troops to support President Idriss Déby Itno government. To the south, the capital of Central African Republic - Bangui, there are no fewer than 300 troops, sent to take part in Operation "disease". In Abidjan, with American United Nations authority, France has deployed about 3,000 soldiers, meant to ease the conflict between rebels controlling the north African state and government, it occupies territory in the south. The situation in Ivory Coast strikingly resembles that of Mali, at least from this point of view.

China's Optics in his relations with Africa

China is the basic trading partner of Africa, the annual volume of Sino-African annual turnover approaching $ 200 billion. China's direct investment in Africa exceeded $ 50 billion annually. Over 1 million Chinese citizens now live on the African continent. Only in Angola are over 350 thousand Chinese. 55% of the workforce of the Chinese in Africa working in food production, cultivating vast arable land and pastures that support even those African agrarian economies.

In 2013, at the beginning of his presidential term in the forefront of China, Xi Jinping visited the first Russia, then went to Tanzania, South Africa and the Republic of Congo, thus announcing his term external priorities. If the visit to Moscow was easily understood by the desire to strengthen the partnership between Russia and China - seen as a counterweight to the global influence of the US tour Xi Jinping in Africa confirmed what analysts have noted in recent years: China is in full offensive the conquest of the black continent, while Europe and the US seem to lose more ground.

Announcing the first visit of Chinese President abroad in mid-March 2013, former Chinese foreign minister, Yang Jiechi, said: "China and Africa are good brothers, good friends and good partners. Visit the new leader of China in Africa shows the importance that we give full Chinese-African relations ". Beijing authorities woos Africa for decades, but their efforts have intensified in recent years, given that China seeks to satisfy the growing needs for energy and raw materials. China imported 1.5 million barrels of oil a day in Africa, about 30% of its total imports.

In 2012, former President Hu Jintao offered African countries loans worth 20 billion over the next three years, part of which China called unconditional aid policy. The move was highly appreciated in Africa, but heavily criticized Western governments criticizing Beijing because the blink human rights abuses and endemic corruption in the region just to get access to oil, copper and timber.

China's interest in Africa has sparked concern especially in Western Europe and the United States, assisting offensive stunning political, economic and energy Beijing black continent. Senator Chris Coons, chairman of the subcommittee on the Senate's Foreign Affairs AU has asked for rapid renewal of trade benefits offered by USA for Africa as part of a broader strategy to combat the influence and investment in growth of China on the continent where tăiesc close 1 billion people.

"All countries are currently boosting for the cooperation with Africa. China sincerely welcomes such a development. At the same time, we hope that all parties will see China-Africa cooperation in an objective light and will respect the decision of Africa to choose their own development partners. Hopefully there will be more exchanges and mutual understanding and less suspicion and accusations, "he said the former head of Chinese diplomacy, Yang Jiechi.

In turn, the special envoy of China Affairs African Ambassador Zhong Jianhua, said the economic and industrial development of Africa could overtake that of China if the "continent sees Chinese companies working there as an economic competition healthy and not as instruments of exploitation. Our obligation is to see Africa becoming industrialized; we see this as a win-win stituation, so our new president will visit three African countries in March (2013 - Ed) ... to underline our commitment to Africa's growth. Africa may decide to take the reins of its economic development; to foloească in the best way and the economy has the potential to compete with China in a positive manner. "

Conclusions

Africa is a continent wonderful with the natural riches, a fascinating history and population, still poorly known, appreciated and valued, which has changed considerably in the last 5-6 decades, when most countries of the continent gained their political independence somehow .

In those decades, the African continent - which is known historically only from the reports of those who saw in it only resources exploited - provided numerous testimonies of its periods of glory on oral traditions, historical and demographic and studies undertaken by botanists, zoologists, climatologists, soil and geologists.

The phenomenon that marked the last half-century Africa is that of increased urbanization. From descriptions of Africa rural - as could be seen by the 50s of last century, we now have some studies on demographic momentum of Africa (which evolved from 110 million in 1900 to about 500 million in 1950 and over 1 4 billion in 2015 today) spectacular population growth especially in cities where the annual demographic growth averaged 7 per thousand people, over 7-8 times higher than in European countries, for example. Although still feed the cities, the villages have the weight to provide subsistence food for the entire population, especially for the urban the area. Simultaneously, large masses of people moving from rural to urban areas in search of a new existential horizon.

In most African cities, bypassing the rigors of urbanization, insists the nostalgia of the old life. In the midst of this new urban civilization, are deeply disturbed relationship with nature. Actors new development areas - mining, ports, industrial plantations etc. - Seeks help from cultural associations and unions, to maintain social cohesion and soul. No large study has not been done with seriousness and professionalism of these new trends, which fundamentally changed, millennial African continent.

Few studies address from the perspective of African and European specialists, current issues, characteristic "black continent". Paraphrasing a Mrs. Gabriela Leahu, once said this: "Now when the high political demands, that worked sometimes as censorship, sometimes as self-censorship disappeared, we consider it appropriate to put to reach those interested in another terms by which the landscape quite poor, the Romanian historiography in this field ... then Africa is exemplary case of European colonial expansion from the late nineteenth century and early twentieth century, continent << >> becoming dark area where they confrunat mainly European powers. In this way, the study of colonial powers in Africa allows a global analysis, but also nuanced facts colonial motivations that have pushed the expansion Powers and people hitherto little interest in overseas territories "

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GLOBALIZATION AS FINANCIAL CRISES PREMISE

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Angela FILIP[61]

Abstract

Financial globalization represents an important form of economic globalization and is a process of interconnection of basic segments of financial markets at national and international level. It is expressed through increasing the volume and intensity of financial flows, which is determined by opening of national financial markets, level of financial leverage and financial integration. Also, it is aggregated form of international financial integration, which refers to increasing global connections created through cross-border financial flows. The carried out research demonstrate, that certain basic features of financial globalization are in fact prerequisites for triggering international financial crises. The amplification of financial globalization increases the instability in the international financial system and the probability of international financial crises. Knowing this allows the facilitation of predicting international financial crises and reducing their contagion effect.

Keywords: financial globalization, financial crisis

JEL classification: G01, G15

Introduction

Globalization is a process in which the world is transformed into a single global system. From the economic point of view, globalization leads to transforming space into a unique world where information, goods, services, capital flow freely.

Yeyati and Williams (2011) define financial globalization as “global linkages through cross-border financial flows that has become increasingly relevant for emerging markets as they integrate financially with the rest of the world”.

Financial globalization concept aims to create an open global market, global financial markets, global financial system, whose appearance and development is based on the phenomenon of deregulation of national financial markets, the emergence and development of new financial instruments and banking and other international financial institutions activity expansion.

Financial globalization requires greater volume of financial flows of capital and increases of their intensity. The size of these processes can be proportional to the degree of openness of national financial markets, level of financial leverage and financial integration.

Russian investigator Evlahova (2007) points to some basic features of financial globalization:

1. Financial globalization is a part of economic globalization, which is presented by deepening interdependence of worldwide countries through increasing volume of cross-border transactions, services and capital, rapid and broad dissemination of technology.

2. Financial globalization became the dominant form of economic globalization. It was found that the capital is one of the most mobile factors of production, which moves quickly in search of profit. This process was catalyzed by the liberalization of capital movement. An important role in increasing capital mobility had information revolution manifested not only through the implementation of a variety of media and information technologies, but also the creation of new capital flow channels (Internet).

3. Financial globalization has changed the structure and composition of global economic problems, has advanced the dominant role of transnational companies and banks and has reduced the role of nation states and international financial institutions, stressing the incompatibility of tasks set by the imperatives of the new global economy. It requires the transformation of national financial systems

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under the influence of financial globalization. One consequence of these changes was the loss of many regulatory instruments by the state and reduction of monetary and fiscal measures effectiveness.

From elsewhere, in general approach, the financial crisis is the situation where money demand is greater than supply (availability) of money. This means that liquidity is rapidly evaporated because available money is withdrawn from the banks, thus forcing banks to sell their assets or investments and to cover their needs, or to collapse. *(Criza financiară, n.d.)*

According to the Romanian scientist Paun (2008), financial crisis is only a manifestation of the economic crisis and reflects a confidence in the financial system increased volatility in the capital markets, a significant decrease in transactions volume on the stock exchange, a disorder of market mechanisms.

Claessens and Kose (2013) associate a financial crisis with "one or more of the following phenomena: substantial changes in credit volume and asset prices; severe disruptions in financial intermediation and the supply of external financing to various actors in the economy; large scale balance sheet problems (of firms, households, financial intermediaries and sovereigns); and large scale government support (in the form of liquidity support and recapitalization).

Scientists Reinhart and Rogoff (2013) consider the period 1900-2010 as very specific in order to study international financial crises (Figure 1).

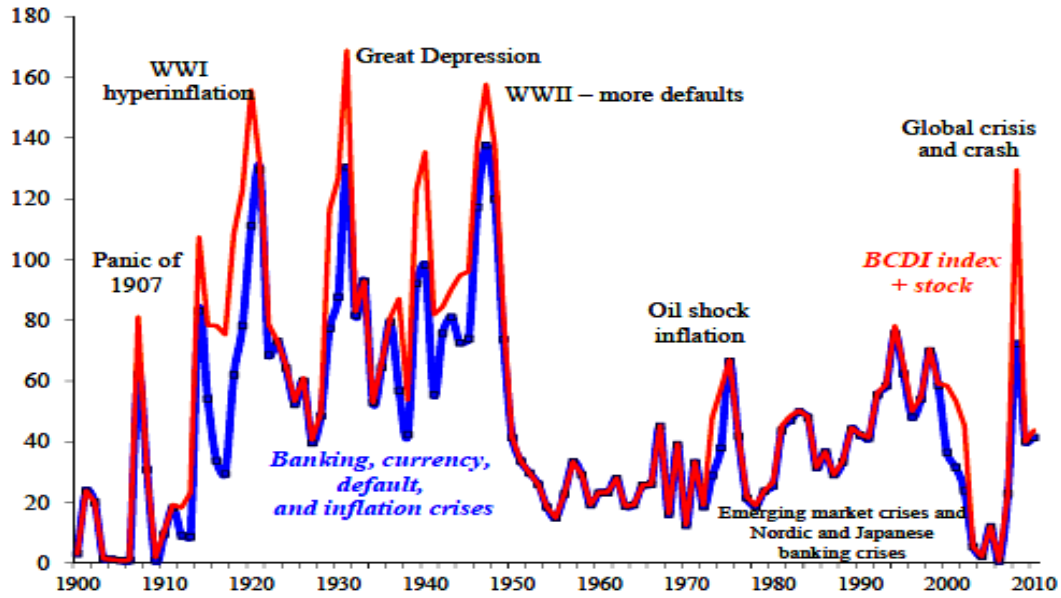

Fig.1. *Varieties of Crises: World Aggregate, 1900–2010*

Source: Reinhart and Rogoff (2013)

The last international financial crisis of 2007–08 (also called Global Financial Crisis) was the worst financial crisis since the Great Depression of the 1930s. *(Financial crisis, n.d.)*

Description of the problem

Financial globalization is now able to gain the ever-increasing flow of funds. Going beyond national restrictions, financial capital contribute to the financial globalization and it ranks the driving force of the overall process of globalization.

At the same time, increasing globalization leads to enormous financial risks in the international financial system, giving it a substantial instability and uncertainty. The result of this instability is fructifies in the form of international financial crises, which, in turn, showed the imperfection of the current global financial architecture.

The actuality of the study is determined by continuous exposure of the national economy from different countries to the impact of financial globalization factors, creating different gender issues

and provides additional opportunities. Addressing the first and taking advantage of the latest is a primary task.

Methodology and data sources

Research carried out in the first place was based on the financial globalization and descriptions of international financial crises triggering during XX and XXI centuries contained in various bibliographic sources. After was examined the existing theoretical concepts and analysts comments on financial globalization and international financial crises. Following was performed generalization and synthesizing of basic ideas and formulate hypotheses on connection between both categories, which were tested with the public databases dialing accessible specialized sites on the Internet. Obtained results were presented in this article.

Results obtained

Conducted research shows the impact of financial globalization on the triggering of financial crises can be considered on the basis of a certain characteristic phenomena, which, on the one hand, are creatures of financial globalization, and on the other hand, are factors that increase the likelihood of financial crises. They are the following:

- deregulation (liberalization) financial markets and institutions and reducing the regulatory authority and monitoring capacity of domestic and international regulators on financial markets;
- cross-border capital flows increasing;
- accumulation of substantial funds in a number of specific areas, free from the control of national legislation and supranational regulators;
- global systemic risk amplifying.

For starters, in our opinion, should be mentioned *deregulation (liberalization) financial markets and institutions and, as a consequence, reducing the regulatory authority and monitoring capacity of domestic and international regulators on financial markets*.

Kallianiotis (2011) affirms that one of the causes of financial crisis of 2007–08 was the deregulation in the U.S. financial markets and institutions which contributed to increasing of lending, corruption, speculation, financial and real assets (even in food) prices and enormous bubbles creation.

Already in the late 1980s related studies indicate that rapidly proceeded deregulation increased the volume of purely financial transactions which now greatly exceeds international trade in goods and services. This new pattern led to economic uncertainty and instability deepening. (Versluysen, 1988)

Russian scientist Sen'kov (2012), in his turn, states that liberalization of economic legislation and state controls reducing significantly limit the possibility of national regulatory institutions to influence the situation on financial markets. Financial globalization impact reduces the ability of national regulators to amend the policies of major players in the financial market, such as multinational corporations and transnational banks. Supranational regulators also have a insufficiency of effective instruments of influence on financial market participants activity.

Financial globalization contributes to erosion of legislative distinction between different types of financial activities wich enables the emergence of financial institutions. As a result, a big number of financial companies operating in the same time in most segment of financial market. This process leads to a significant exasperation of systemic risk, as the bankruptcy probability of a major financial institution which in turn can cause instability in a number of markets. (Sen'kov, 2012)

An additional problem in this context is to promote financial market innovative process both nationally and internationally as a basic feature of financial globalization. Recent research shows that in the absence of effective regulation, financial innovation becomes a factor for financial crisis triggering. (Klein, 2010)

Concern economic analysts finds, an important consequence of financial globalization is the spread of securitization of banking activities and the use of derivatives wich make financial transactions

much more complicated and lost of transparency. Frequently it is not always possible to evaluate assets which underlie traded securities. (Sen'kov, 2012)

Moreover, world derivatives market is tranformed now in the largest financial bubble. In 2008 the market volume constituted $600 trillion (Barrett, 2008). In 2010 it increased to $1200 trillion (Cohan, 2010) and for 2015 the forecast is $1500 trillion (Snyder, 2014). If this bubble will finally burst, it will be a complete disaster for the financial system of the planet.

The next aspect of financial globalization, which is to be examined, is *cross-border capital flows increasing.*

But, from other hand, Broner, Didier, Erce, Schmukler (2013) demonstrated that some international capital flows have played an increasingly important role in the business cycles of high-income and middle-income countries, especially since the 1970s and during episodes of financial crises. Gross capital flows are more an more larger and volatile. In compliance with those authors, gross capital flows are pro-cyclical. Capital flows tend to increase during expansions and to decrease during economic downturns. During crises, total capital flows collapse because of retrat of investors from foreign markets.

International Monetary Fund experts indicate on costs of international capital mobility as factor of financial crisis (Wang Xiaoyi, 2013):

- Large-scale capital inflows could affect the independence of monetary policy, increase money supply and in turn add to inflationary pressures and create asset bubble risks.
- Capital surplus can aggravate balance of payments distortions and currency appreciation pressure.
- Large-scale capital outflows could have negative effects on a country's international credit rating, undermine investor confidence and lead to currency devaluation pressure and balance of payments deficit risks.
- Large movements of short-term speculative capital could endanger financial stability.

Additionally, in our view, an important issue is cross-border capital flows orientation towards the formation and amplification of speculative bubbles and massive withdrawal of investors funds cause their breakage and financial crises triggering.

Data presented by McKinsey Global Institute demonstrates the amount of cross-border flows tend to increase on the verge of financial crisis. Thus, they have achieved 4,9 trillion in 2000 and 11,8 trillion USD in 2007. But the onset of the international financial crisis, the value of cross-border financial flows tends to fall sharply. (McKinsey, 2013)

This regularity is confirmed by Figure 2 which also shows the structural dynamics of cross-border capital flows.

That trend takes place for all type of cross-border capital flows, but their stability level is different.

Becker Chris, Noone Clare (2009) remark that foreign direct investments and reserves have come to be viewed as being relatively stable. In contrast, portfolio investments and bank and money market flows are considered as speculative (also called *hot money*) and subject to sharp reversals, thereby being treated as a factor financial instability.

In this context it may be referred to the phenomenon of *capital flight* (as symptom rather than a cause of financial crisis) expressed by widespread currency speculation linked with cross-border movements of funds that affect national financial markets. Frequently capital flight can be caused by expectations of devaluation of the home currency and can become self-fulfilling, as depletion of the central bank's reserves force it to devalue. In that way capital flight becomes a source of financial instability. (Darryl)

Figure 3 shows the structural dynamics of cross-border capital flows in deographical distribution section. In the 1990s and up to 2008 advanced economies ensured at least 75% of gross capital flows before the crisis, and roughly 60% after the crisis. The role of emerging countries in gross capital flows has been rather limited.

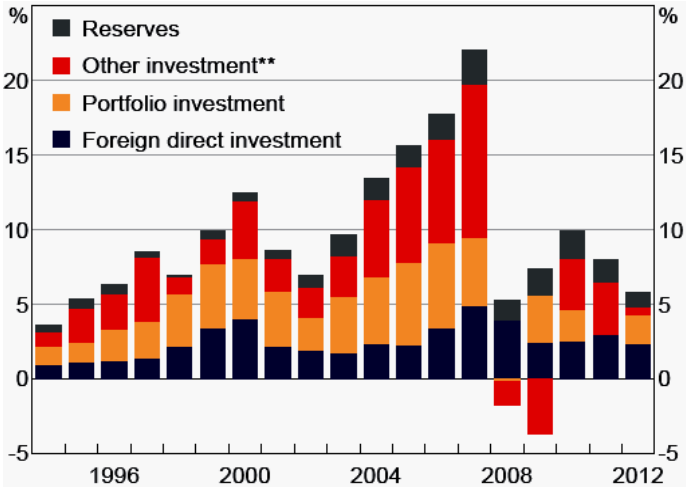

Fig.2. *Global Capital Flows (Per cent of GDP, annual)*

Source: (Elliott, McLoughlin, Rankin, 2014)

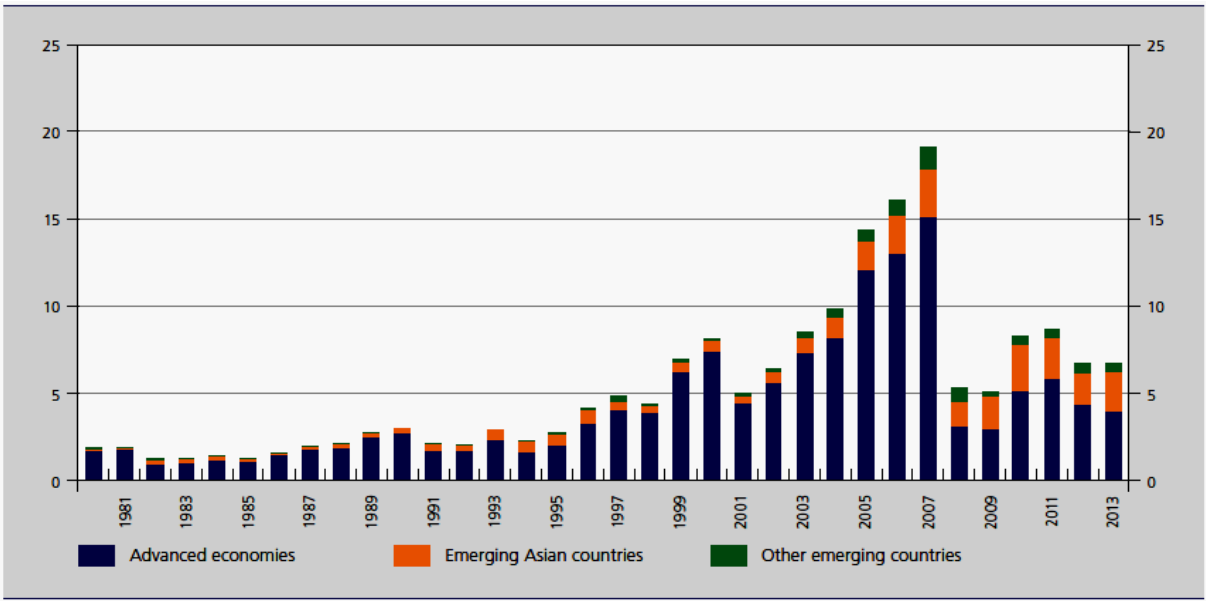

Fig.3. *International gross capital flows (in % of global GDP, sum of inflows and outflows)*

Source: (Butzen, Deroose, Ide, 2014)

Another feature of financial globalization is *accumulation of substantial funds in a number of specific areas, free from the control of national legislation and supranational regulators*.

Globalization implies international network of financial centers expanding, a leaner system dominated by a handful of strategic cities being evolving. Financial operations disperse around the world, but only a few cities have enough resources to be dominant. (Sassen Saskia, 1999)

A global financial centre is a city with a large number of internationally significant banks, businesses, and stock exchanges. An international financial centre is a non-specific term usually used to describe an important participant in international financial market trading. An international fi nancial centre will usually have at least one major stock market. (Fetiniuc, Luchian, 2013)

Financial globalization progressed with increasing market capitalization and liquidity in a small number of large financial centers. Its financial activity was essentially concentrated in the large financial centers. (Das, 2010)

At the moment in the world there are 82 international financial centers, but, as first, According to the 2014 Xinhua-Dow Jones International Financial Centres Development Index, can be mentioned New York, London, Tokyo, Hong Kong and Singapore. (Financial Centre*, n.d.*)

But in the context of the globalization and financial crises is required also to examine activity offshore financial centers.

According Rose-Marie Belle Antoine, they can be defined as regimes which has chosen as a main or important path to development, legislative, financial and business infrastructuree which is more flexible than orthodox infrastructure and which cater more specifically, and often exclusively, to the needs of non-resident investors this legislative framework includes innovations in trust, banking, fiscal, insurance, financial and company law. (Offshore, n.d.)

Offshore financial centers activity becomes a serious problem for global financial stability with the growth of financial flows served by these entities and the massive increase of stored financial assets, which tends to exceed the overall volume of financial reserves and are free of any official control.

Recent studies show some data that characterizes them:

- The IMF estimated in 2010 that small island financial centres alone contribute $18 trillion, which is equivalent to around a third of the world's GDP. (Jakopovich, 2013)
- The world's fifth largest financial centre, hosting over three-quarters of the world's hedge funds, and $1.9 trillion on deposit – four times as much as in New York City's banks. (Jakopovich, 2013)
- Tax Justice Network (2014) estimated that the stock of financial wealth held offshore, hardly taxed or untaxed and in substantial conditions of secrecy amounts to some $21-32 trillion.
- Global Financial Integrity estimated that in 2012, $991.2 billion left developing countries in illicit financial outflows, of which about 45% end up in offshore financial centers. (*Illicit, n.d.*)

Palan and Nesvetailova (2013) drew attention on the phenomenon of *shadow banking* - a complex network of financial intermediation that takes place outside the balance sheets of the regulated banks, and thus remains invisible to the regulatory bodies.

Since the crisis erupted in 2007, research into shadow banking has progressed quite rapidly. The Financial Stability Board put the global size of the shadow banking system at around $67 trillion in 2012 and at $71 trillion in 2013 (*Global, n.d.*).

Shadow banking activity is linked to an important dilemma (Nesvetailova, 2014). On the one hand, today shadow banking is a vital part of financial activity, helping banks meet liquidity needs, conducting securitization and lending functions and accommodating a variety of economic interests, from investment banks and pension funds to high-net worth individuals and sovereign wealth funds. But on the other hand, shadow banking raises at least three inter-related problems:

- Many visible banks are able to enlarge their de facto size, often creating undetected leverage and thus, adding to the problem of "too big to fail."
- Netting several entities into opaque chains of credit intermediation, the shadow banking system amplifies the scope for regulatory arbitrage.
- Shadow banking obscures the sources and real dimensions of systemic risk in the financial system and aggravates the problem of non-transparency of finance.

Another problematic feature of financial globalization is *global systemic risk amplifying.*

It's about of systemic risk in securitized globalized markets, wich is created by unexpected events that heighten uncertainty sharply and impair market liquidity. The last may lead to price collapse in individual markets and in the pricing of specific assets. Following caused stress waves extends to the funding liquidity of financial institutions across the globe that are supporting those individual markets. Market illiquidity can lead to significant real economic effects. (Lipsky, 2009)

Gianni De Nicolò and Luciana Juvenal (2010) have demonstrated the link between financial integration, globalization and systemic risk. Following the logic of obtained results, we can highlighte three basic channels:

- Increasing integration of domestic financial markets and international, through proportions, mobility and global financial market volatility;
- Increasing dependence of financial integration and global financial market liquidity through the core segments;

- Examination of institutions quality and corporate governance as important determinants of the levels of financial integration and globalization.

Conclusions

Performed analysis confirms the dependencie between financial globalization deepening and international financial crises triggering. In this context it is deregulation (liberalization) financial markets and institutions and reducing the regulatory authority and monitoring capacity of domestic and international regulators on financial markets, continued growth of cross-border capital flows increasing, accumulation of substantial funds in a number of specific areas, free from the control of national legislation and supranational regulators, global systemic risk amplifying. Therefore tracking of global financial processes permits the prediction of the global financial crisis. It also permits to improve the international financial system regulation and domestic financial policies adaptation to new realities.

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IMPLEMENTATION OF FINANCIAL DERIVATIVES ON THE CAPITAL MARKET OF REPUBLIC OF MOLDOVA: CHALLENGES AND OPPORTUNITIES

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Marcelina ROŞCA[63]

Abstract

The creation of derivatives market in Republic of Moldova is an actual necessity dictated by the improvement of market relations on international financial market and the development of national capital market. However, the implementation in practice of this desideratum can be realized in certain circumstances. The Moldovan capital market is very young and is trying hard to conform to international standards. Its evolution hasn't still reached the level of investors' expectations and is facing serious problems. This research includes the analysis of capital market of Republic of Moldova and possibilities of implementing derivative instruments by market participants.

Keywords capital market, derivatives market, derivative financial instruments, futures, options, forward contract, stock exchange, commodity exchange, OTC market

Jel classification: G23, G28, Q14.

Introduction

During the past decades the derivatives market has known a continuous evolution on international scale once with the development of a variety of new financial instruments. This phenomenon is produced due to a high level of financial market volatility and instability of interest or exchange rates that determined investors search new opportunities for risk management.

Successful economies should evolve towards direct capital market model where savings are intermediated through financial market instruments and risk is, thus, effectively managed by derivatives market. A secure liquid capital market and a strong base of institutional investors are key ingredients for economic development. Markets are deemed to be incomplete if they are operating only on spot basis or without the futures price discovery element of the derivatives markets.

Derivatives require some conditions that demonstrate market maturity, but they also enhance the liquidity and price discovery in those underlying markets.

Capital market development in Republic of Moldova

Capital market from Republic of Moldova is still on its incipient phase of development and does not offer population and real sector sufficient instruments for financial intermediation.

First characteristic of the Moldovan capital market evolution is represented by *a low volume of transactions with securities*.

Analyzing the segments of the Moldovan securities market during the last years, there is an obvious prevalence of OTC market according to number of transactions performed, and an insignificant record of stock exchange transactions in terms of transactions' volumes. Data provided in Table 1 attest uneven developments of volumes and number of transactions performed on stock exchange, thus in 2014 registering a low decrease in transactions' volumes on the secondary market in ratio with the previous period. This fact allows us to determine *a poor investment activity on the capital market as the rhythm of transactions performed by participants is practically the same during the last years.*

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Table 1

Transaction volumes on the securities market during 2009-2014

Indicator	2009	2010	2011	2012	2013	2014
SE market						
Nr. trans. (units)	1570	2601	2046	1877	1258	1471
Vol. trans. (th. lei)	141.22	267.89	241.97	623.29	822.01	708.6
OTS market						
Nr. trans. (units)	218267	3082	3267	2521	2846	2941
Vol. trans. (th. lei)	480.7	291.3	1698	628.2	889.6	599.2
Total sec. market						
Nr. trans. (units)	219837	5683	5313	4398	3744	4412
Vol. trans. (th. lei)	621.89	559.14	1940.0	1251.5	1711.6	1307.8

Source: data provided by National Commission of Financial Market, www.cnpf.md

A good indicator of capital market activity consists in the number of new created joint-stock-companies, as it shows the level of investors' interest for capital market as destination for resources' placement, creation of new investment projects. Unfortunately, *at present, Republic of Moldova doesn't represent an attractive investment destination for investors*. Thus, by 2014, the volume of issues done for creation of joint-stock companies reached 0.12 million Lei, being registered only 2 new companies, with a dramatic decrease in comparison to 2012, when this indicator reached 356.2 million Lei (CNPF, 2014, p. 60).

Additional issues of securities represent efficient tools in the process of attraction of investments in the real sector of economy on a long-term, which are necessary for joint-stock companies for the realization of investment programs. During 2014 additional issues of securities were done by means of closed issues, being preferable common stocks' issues. According to Figure 1 the volume of additional issues in 2014 registered 1249.5 million Lei, with 299.8 million Lei higher in comparison with previous year (CNPF, 2014, p. 61). Still, *this indicator is too low for an efficient development of capital market, and allows us to conclude that investors find other sources to cover investment necessities, and are avoiding the capital market*. The highest level of additional issues was reached in 2004 (1636.5 million Lei), when there were registered additional issues by JSCs in electrical networks (675.8 million Lei), Apa-canal Chisinau (413.3 million Lei) and by banks (290.17 million Lei).

Low volumes of issues demonstrate *a weak development of material basis on the domestic capital market*. *The existent investments are not sufficient for the creation of the market material basis and its subsystems of insurance*.

Another characteristic of investment activity on the domestic capital market is *lack of financial instruments*, as only two types of securities are traded - stocks and bonds, while public issue of securities through public auctions have an episodic nature. Thus, state securities are not used to finance investment projects of national importance and are missing on the secondary market. Collective investment institutions are also missing.

In great part, transactions that are performed on the stock exchange, are transactions of consolidating stocks' packages. This process started once with distribution of ownership bonds and the privatization process from '90s, but, the problem is that once with receiving these bonds, population was not instructed how to use them and some "smart investors" started a process of barter, by changing some goods and money means through stocks, and population received a value less than the value of stocks held (Hîncu R., Iordachi V., 2012, p. 124). Legislative juncture at that moment allowed the new shareholders not to register these stocks and after legislation reformation on the capital market, this process finally ended. The biggest tragedy consisted in bankruptcy of investment funds in one single night, leaving population without shares and money.

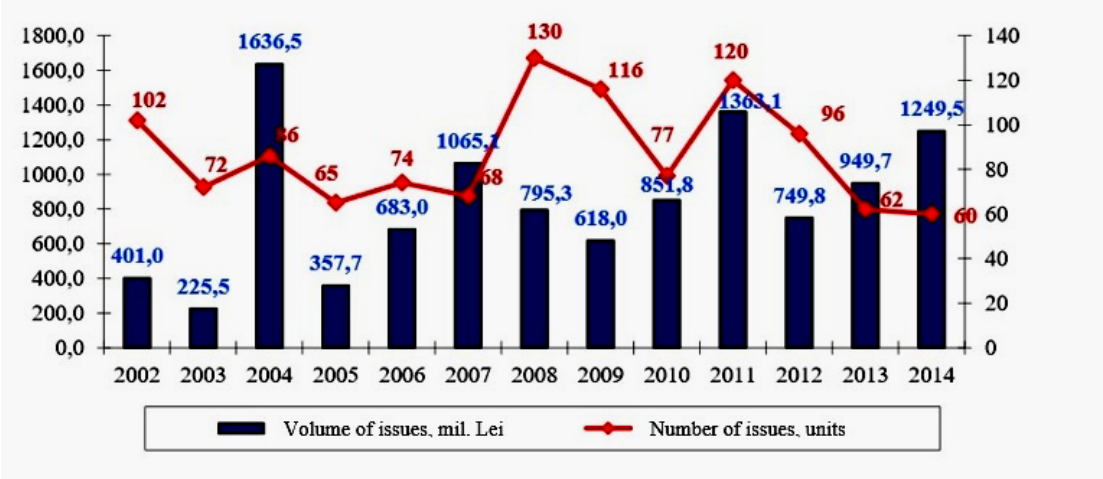

Fig.1. *Additional issues of securities on the capital market of Moldova during 2000-2014*

Source: National Commission of Financial Market, 2014, p. 61

Practically *all issues of shares on the Moldovan capital market are closed and limited to a restrained circle of persons*, being performed outside the stock exchange, thus, limiting the participation of other potential investors. Thus, analyzing transactions with securities of joint-stock companies included in the listing at the Moldova Stock Exchange, bank sector owns the prevalence, registering the total volume of transactions 460 million Lei. The same situation is stated in performing transactions within out crying unique packages of stocks - 51 million Lei. The real sector is represented only by JSC "Efes Vitanta Moldova Brewery", which traded on the secondary market 8 shares in volume of 785 Lei (CNPF, 2014, p. 62).

In Republic of Moldova there are few profitable securities that could bring profits to investors in form of dividends or from speculative transactions. The most profitable shares are issued by commercial banks and insurance companies. For example, if the nominal price of one share issued by a bank in Moldova is 200 lei, the earning from dividends is 75%, while from bank deposits - 12%.

The major shareholders in companies from the real sector are primarily directed towards consolidating their controlling stake. There is practically no possibility to invest in profitable shares of banks, as most issues are done by means of closed procedure among already existent shareholders. The refuse of companies to perform an open issuance procedure is explained by control over minor shareholders by the controlling ones, who are afraid to reduce their participation stake.

In conclusion, for the domestic capital market the following peculiarities demonstrate poor achievements in its development (Iordachi V., 2014, p.113):

- Lack of active institutional investors;
- A poor capital market infrastructure that does not correspond to standards of European capital market model;
- Insufficient resources for the creation of market material basis and its subsystems of insurance;
- Lack of financial instruments;
- Few profitable securities that could bring dividends or profits from speculative transactions;
- Transactions are primarily directed towards consolidating the shareholders' controlling stake.
- Investments in state securities are limited only to banks.
- Restrained circle of investors;
- Few companies from real sector are listed on the stock exchange, while the major part is represented by shares of commercial banks.

Another barrier for the development of capital market is lack of culture in investments on behalf of investors, thus a great part of population seems not to have any idea about capital market transactions.

Legal premises for the development of derivatives market in Republic of Moldova

In the content of integration process of Republic of Moldova into European Union, regulation bodies of capital market launched a whole set of activities in adjusting the national legal framework towards the EU directives, which promises a radical reformation of market infrastructure and a strong openness for foreign investors. Thus, the Parliament of Republic of Moldova adopted *Law nr. 171 from 11.07.2012 „On capital market"* and in this context market actors in leading role banks hope to change many things, in conditions in which the old rules limited the development of the market and there existed many barriers that hindered market intermediaries, as well as issuers of securities.

According to The Law on capital market, which was developed according to the requirements of EU directives, namely MiFID, financial instruments are treated as a whole set of[64] (CNPF, Law on Capital Market, 2012):

a) securities;
b) units (securities) issued by undertakings for collective investment in transferable securities, also called investment funds;
c) money market instruments;
d) options contracts, futures, swaps, interest rates forwards and other financial derivatives relating to securities, currencies, interest rates, rates of return, financial indices or assets;
e) financial derivative instruments for transferring credit risk;
f) financial contracts for differences;
g) other financial instruments admitted to trading on a regulated market and / or in a multilateral trading system.

Thus, national legislation gives premises for the implementation on the Moldovan capital market of some innovational products like derivative instruments - futures and options contracts on commodities or currency as underlying assets.

Derivative financial securities are also reflected in The Moldova Stock Exchange Regulation, where art. 24 (c) states that *options and other forward contracts are admitted for trading on stock exchange*. At the same time, *forward contracts include futures, options and other derivatives, which represent a type of standardized contracts in terms of quantity and price, and which involve making / accepting delivery of securities at a fixed date in future (CNPF, Regulile Pieței Reglementate, BVM, 2015)*.

A successful implementation of derivative instruments on the domestic capital market cannot be possible within actual legislative framework. It is necessary to highlight and formulate correct notions of financial derivatives in the Law on capital market, as well as to define separately the terms of futures and options contracts.

At the same time, the existing legal system cannot create necessary conditions for the successful regulation of futures' trading system as all procedures should be regulated in complex, starting with registration, securities trading and ending with the liquidation of instruments.

Implementing derivatives in national economy: opportunities and main barriers

Considering the peculiarities of national economy development, in Republic of Moldova, at present, *derivative instruments could be implemented by agricultural producers to protect against price fluctuations, or by real sector to secure imports and exports against currency rates changes*.

For the whole periods of national economy development, prices on agricultural products suffered price changes (Figures 2 and 3) caused in major part by unfavorable climate conditions, but also by external factors, like: fluctuation on external markets of prices on feed crops that subsequently influence the prices of other fodder crops; entry of international companies on the domestic market,

[64] Art. 4 (1) of the Law on capital market

which have the capacity to occupy a greater part of the market; losing World Bank credit resources in form of subventions in 2009, as a result of Government resignation, etc.

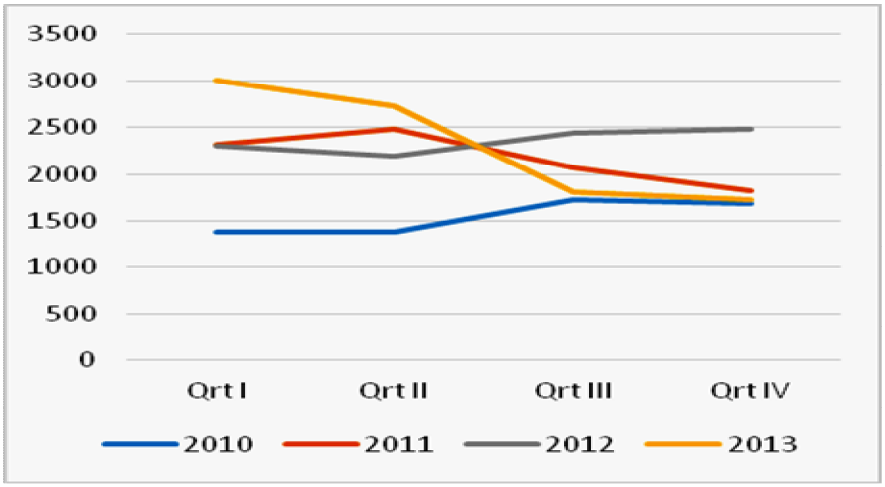

Fig.2. *Quarter evolution of wheat price in Rep. Moldova for 2010-2013, Lei/t*
Source: elaborated by authors in base of data from National Bureau of Statistics of RM

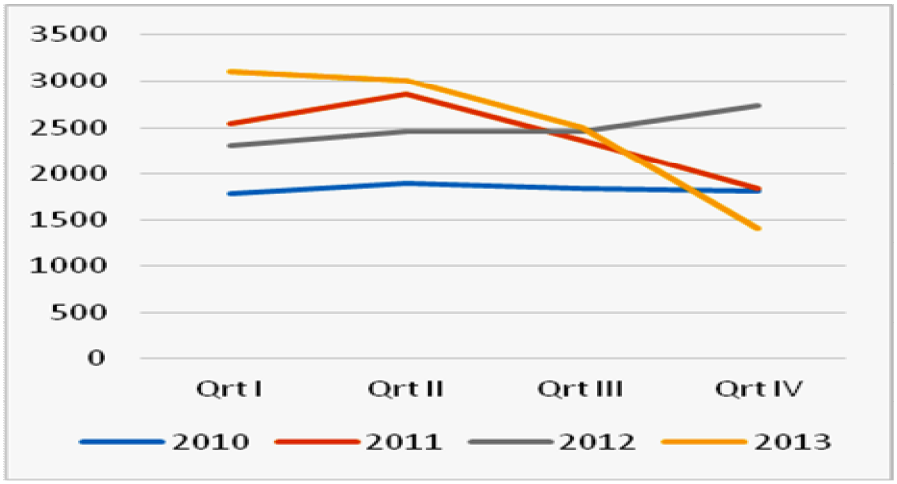

Fig.3. *Quarter evolution of corn price in Rep. Moldova for 2010-2013, Lei/t*
Source: elaborated by authors in base of data from National Bureau of Statistics of RM

Another factor was the continuous increase of VAT quota applied to agricultures from 8% to 20% beginning with 2013, causing price increase by 25%. All this suggest an extremely vulnerable and manipulable character of agricultural market on different external factors, which determine farmers search opportunities for risk management.

In Moldova, first location, where producers of agricultural production and especially of cereals could apply for forward transactions, is The Commodities Exchange. Thus, according to the amendments to the Rules of exchange trade, companies have obtained registration of forward contracts with advance payment opportunity. These contracts allow producers obtain advance payments for future production of the product, setting initial prices for their production. Having the guarantee that their production will be purchased, the sellers are able to set a price that will ensure optimal profit. Also, within The Commodities Exchange trading rules, forward contracts can also be used to obtain a bank loan on the account of future production *(*Universal Commodity Exchange of Moldova, 2014*)*.

Although The Commodities Exchange of Moldova offers possibilities to local farmers to trade on a forward basis, still, businessmen are reserved to apply for these innovative trading techniques and the statistics on these transactions lacks.

The creation of a functioning market where the derivatives would be traded is an important problem for national authorities in the attempt of implementing derivatives on the Moldovan capital market. These instruments are more complex in comparison to the primary financial securities and their implementation should conform to some strictly determined terms. International

experience relates that a successful implementation of a futures contract depends on the market liquidity of the underlying asset. This is the main premises that determined the reorganization of Commodities Exchanges from other countries into futures market.

Businessmen could also use OTC market in Moldova to minimize risks related to price changes.

In advanced economies, a functional OTC market adds a very necessary time variable for risk management in agriculture. The vast majority of agricultural producers in Moldova, especially those who hold small and medium-sized farms, at present, is based almost exclusively on physical spot markets to sell their products. Lack of derivatives accessible on local capital market, such as forwards, options and swaps, does not allow them revenue optimization over a period of time. If it were possible to "lock" the price of transactions long before, it might exist the possibility to better plan investments and, thus, extend production.

In such a way, development of a derivatives market is important, but, still, in Moldova Government is actively intervening in fixing prices, which represents a significant barrier.

Also, ***OTC market should base on some prerequisites such as transparent grading and weighting of products, transparent information on spot prices, quality of production, as well as data on how much products were produced, deposited and consumed***.

The organization of trading with financial derivatives at the Moldova Stock Exchange, for the moment, is not possible, irrespective the fact that it is the only financial institution in the country equipped with necessary system and infrastructure that might organize transactions with futures. The Moldova Stock Exchange is a very young institution, having only 12 years of activity, but which is trying hard to correspond to all international norms and standards.

However, realizing the analysis of stock activity in Moldova, we have come to the conclusion that to be successful in trading, it is not enough to create trading platforms and purchase latest technology, it is necessary to invest in specialists who would activate in terms of market forecast and analysis, as well as to eliminate the existing psychological constraints that is created due to superficial knowledge and wrong perception of stock exchange activity by government authorities and investors.

Integration of the Republic of Moldova in world economy and the tendency to cover new market segments will slowly lead to implementing innovational products within stock exchange transactions. It is not difficult to organize trading with these titles, the main problem appears within the process of elaborating and maintaining the trading mechanism with participation of external traders. Thus any agent (resident or nonresident) should have the possibility to access easily trading platforms (without the presence of broker in trading room) and this supposes the existence of a functioning distance trading system, which in Moldova lacks.

In order to improve trading activity on platforms of Moldova Stock Exchange, as well to give premises for derivatives' implementation, the following recommendations would be advisable:

- Improving electronic trading mechanism, creation of an adequate physical location for performing transactions and open auctions;
- Creation of an effective communication network that could provide an instant distribution of information to all beneficiaries on prices and transaction volumes, respecting the principle of equal access;
- Improving the mechanism of transactions' registering;
- Creation of efficient margins, deposits and clearing systems that would allow customers realize their gains from futures positions;
- Creation of viable options and futures contracts that will be permanently adapted to new market juncture.

At present, the Moldova Stock Exchange is regarded as a functional institution equiped with automated trading system, which could offer the necessary technical suport for the organization of transactions with derivative financial instruments. Unfortunately, the poor condition of telecommunication networks and the withdrawal of external financial support offered to it impede full and practical realization of this goal. Implementation of derivative financial instruments must be preceded by preparation of trading mechanisms, organizing special courses for professional participants on theoretical and practical approaches in organizing transactions with these products.

It will be also advisable to create a separate department within the Moldova Stock Exchange or Commodity Exchange to perform transactions with derivatives. Thus, it would be less difficult to organize trading with these instruments. Listing procedures, namely registration of futures contracts and their admission for quotation, could be accomplished by the existing Listing and Trading Department, while clearing and settlement functions may be assigned to the Clearing and Settlement Department. At the same time, implementation of these changes requires the modernization of the existing system of electronic negotiation, and the creation of a guarantee fund by introducing a system of margins.

Conclusions

For a successful implementation of financial derivative instruments in Republic of Moldova, the following recommendations would be necessary:

- Increasing production level in national economy, which will foster the liquidity level of financial assets proposed for negotiation (at present, only state securities could be included within underlying assets for futures contracts, as they are most liquid on the domestic capital market).
- Elaboration of a more concise legislation on trading mechanism of derivative instruments;
- Modernization of the activity of the National Securities Depository according to international clearing and settlement principles of trading financial derivative instruments;
- Attraction of free financial resources from national economy and foreign investors on capital market;
- Integration of domestic capital market into international financial circuit and a better collaboration with foreign investors.

It is important to elaborate a complex strategy of capital market development in Moldova, which would in fact be a normative reform that would trace distinct efficient development methods, including – capital market development concept on norms of populations' informing, as well as reestablishing of investors' trust in institutional structures. For a positive development of capital market, population needs to be informed on the possibilities of active and efficient trading on the secondary capital market.

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INTEGRATION POTENTIAL OF AFRICAN REGIONAL ECONOMIC COMMUNITIES

Eduard MARINOV[65]

Abstract:

The paper presents a theoretical framework for the assessment of the progress and success potential of regional integration agreements among developing countries taking into account their specific features such as stage of economic development, size of the economy, openness to the global economy, trade regimes and the patterns in their international trade. It then applies this framework to the regional economic communities in Africa that are regarded as building blocks of the African economic community – the Community of Sahel-Saharan States, the Common Market for Eastern and Southern Africa, the East African Community, the Economic Community of Central African States, the Economic Community of Western African States, the Intergovernmental Authority for Development and the South African Development Community. For each community the paper outlines the main conclusions on the deepness and potential of the integration processes using the developed theoretical framework.

Keywords: economic integration, regional integration agreements, African economy, regional economic communities

JEL classification: F15, F55

Introduction

Regional economic integration is one of the main trends in the development of international economic relations in the last few decades. There are multiple examples, practically everywhere in the world, that demonstrate that it is not an isolated event, but an actual global phenomenon. The opportunities that are presented by the different forms of economic integration arrangements are growing as well as are the means and ways for their utilization.

Theories of economic integration and its benefits are not fully applicable to integration agreements among developing and least developed countries. The rationale behind economic integration among developing countries could not be defined and explained just by the static and dynamic effects that determine integration between developed economies. To assess the integration benefits and costs for developing countries one must take into account their specifics.

Although it is a stated priority goal of state and government leaders since the early year of independence in the middle of the XX century, the process of political integration in Africa is progressing slowly, mainly due to lack of political will on the part of African countries. In the area of economic integration, which has a much shorter history, achieved results, albeit insufficient against the stated objectives, are significantly more.

Seven of the currently existing 16 regional economic communities in Africa are officially acknowledged as building blocks for the creation of the African economic community – the Community of Sahel-Saharan States, the Common Market for Eastern and Southern Africa, the East African Community, the Economic Community of Central African States, the Economic Community of Western African States, the Intergovernmental Authority for Development and the South African Development Community. However, they are too different in terms of the features of their economic development and international trade. Moreover, there are great differences between their member states, as well as between the dynamics and the specific features of integration processes within each REC. Thus the communities will be presented separately, making an attempt to assess the progress and the potential of integration processes within them.

Integration determinants in developing countries

In most cases, theories of economic integration and its benefits – of dynamic ones, but even more of static ones, are not fully applicable to integration agreements among developing and least developed countries. Meier (Meier, 1960) claims that Viner's analysis has limited or no relevance to integration among developing countries. Even Balassa (Balassa, 1965, p.16) claims that theoretical

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literature on economic integration issues discusses customs unions only in industrialised countries. Their problems and environment are not related to economic development, but more to relative changes of production and consumption features.

The traditional theory of economic integration relies on many factors in order to reach the conclusion that net static effects determine the welfare effects of integration. Based on them, some generalisations can be made about the motivation of countries to participate in integration processes. This part of the study will try to highlight those factors and effects of economic integration agreements that are relevant to developing countries and will be used for the purposes of the empirical analysis of African Regional economic communities.

Traditional theory assumes that the larger (in economic terms) the participating countries are, the more substantial the benefits of integration will be. According to Abdel Jaber (Abdel Jaber, 1971, p.262) if the size of the economy is measured by the gross national product, integration benefits for developing countries are negligibly small. Balassa on the other hand claims that integration gains depend not only on the size of the countries participating in the integration arrangement, but also on their rate of economic growth. Thus, as developing economies tend to grow at higher rates than already developed ones, the benefits of integration for them would be even bigger (Balassa, 1961, p.38). Another possible measurement of the size of the integration community is the number of population. Under this criterion, developing countries will surely benefit from integration as they are usually over populated (Hosny, 2013, p.144).

Developing countries in general are specialized in the production of primary products. According to Abdel Jaber (Abdel Jaber, 1971, p.256-257) there is nothing wrong with that as long as the economic surplus gained from this type of production could be reallocated and invested efficiently in other sectors. That however is rarely what happens in reality, thus most developing countries adopt a trade policy of diversification and import substitution to accelerate economic growth. Balanced growth can be achieved by small developing countries by increasing the size of the market, benefiting from economies of scale, and expanding their inter-industry transactions, i.e. through economic integration. For these effects to be achieved however, a strong commitment is required – both in economic and political terms.

In the past, developing countries have sought motivation for economic integration in the benefits from trade diversion and import-substituting industrialization. Later on, with the introduction of the ideas of the dynamic effects of integration, they began to find arguments for integration in the economies of scale, investment creation, technology transfer, etc. Nowadays, however, the integration initiatives of developing countries far exceed those arguments – most of them pursue policies of trade liberalization and deregulation as part of their overall stabilization programs agreed with international organizations. This approach has the goal to make economic integration policies compatible and complementary to other policies in order to promote international competitiveness. Therefore, according to Hosni, most developing countries regard economic integration as a tool for more competitiveness in a global economy (Hosny, 2013, p. 143).

Lipsey assumes that the lower the share of international trade in GDP of the member states of an integration agreement is, the greater the expected benefits of a customs union on welfare will be (Lipsey, 1960, pp. 508-509). This is very important for developing countries because trade as a percentage of GDP in low-income countries has always been lower than in countries with a high level of income, although in recent years this imbalance is decreasing (Hosny, 2013, pp. 144-145). However, the same does not apply to countries with medium levels of income and least developed countries – their share of trade in GDP is even more significant than that in high-income countries. It can therefore be concluded that this criterion is not applicable to developing countries, because subgroups among them may have a larger or smaller share of trade of GDP compared with high-income countries.

According to Lipsey an integration agreement will bring more benefits in terms of welfare if the share of intraregional trade is growing, while trade with the rest of the world is decreasing (Lipsey, 1960, pp.508-509). Studies show that trade between developing countries is always much weaker than that between developed countries, suggesting that the benefits of integration regarding welfare will also be smaller.

However, other researchers (Balassa, 1965; Abdel Jaber, 1971) believe that this assumption should not always be taken for granted. They list several factors that restrict trade among developing countries, arguing that if these barriers are removed, trade flows between developing countries engaged in an integration process will likely increase. These factors include: first, the low level of economic

development; second, inadequate transport infrastructure and facilities; third, foreign currency control and other restrictions on imports; fourth, inadequate marketing; fifth, the lack of standardization.

It is widely recognized that the best indicator of the success of an integration agreement is the increase of the share of intra- and interregional trade in the total trade flows of member states. Although this is an important aspect of integration Inotai (Inotai, 1991, p.10) believes that it should not be seen as a means to its end. Equally important are the industrial development, the adequate infrastructure, the increase of the technological level, etc. Furthermore, the growth of regional trade may be the result of trade diversion from more efficient and competitive third countries. Therefore it can be regarded as positive only if it is combined with improving global competitiveness as a whole.

A major part of the imports from developed to developing countries consists of capital goods. From the dynamic analysis point of view, integration among developing countries requires substantial investments and since most of them are imported from developed countries in the form of capital goods it is likely that the volume of imports of integrating developing countries will grow. The conclusion of Mikesell is that the long-term goal of integration between developing countries should not be to reduce trade with the outside world, but rather to change in their trade structure (Mikesell, 1965, p.209).

Sakamoto (Sakamoto, 1969, p.293) believes that if the result of integration among developing countries is the trade diversion of consumer goods, this will release more foreign currency for imports of capital goods from third (developed) countries. The volume of trade with the rest of the world may not change or may even increase, but the important thing is it changes its structure.

Another thing that should be noted is that while in developed countries the main rationale for economic integration comes from economic groups of stakeholders, in developing countries integration processes often initially start as a political goal and effort, which in most cases leads to unsatisfactory economic results. Integration processes could be interpreted from the point of view of a combination of economic and political determinants. To achieve that one could use the system for combining economic and political factors to assess the success potential of an integration arrangement, first introduced by Haas and Schmitter (Haas and Schmitter, 1964, p.713-720). The system identifies four options of combination of those factors: identical economic goals and strong political commitment; close economic goals and strong political commitment; identical economic goals and weak political commitment; close economic goals and weak political commitment.

Haas and Schmitter claim that a given integration scheme in the first two cases has a strong, in case 3 – medium, while in case 4 – low potential for success. Regretfully case 4 is the most common in practice.

From the above said, it is obvious that the rationale behind economic integration among developing countries could not be defined and explained just by the static and dynamic effects that determine integration between developed economies. With developing countries some factors have a stronger, while, controversially, others have a weaker impact on their willingness to participate in integration agreements. To assess the integration benefits and costs for developing countries one must take into account their specifics such as stage of economic development, structure of the economy, production characteristics, demand preferences, trade regimes and policies, etc., as well as to have in mind the complexity of the political determinants of economic integration among developing countries.

African regional economic communities

Seven of the currently existing 16 regional economic communities in Africa are officially acknowledged as building blocks for the creation of the African economic community.[66] However, they are too different in terms of the features of their economic development and international trade. Moreover, there are great differences between their member states, as well as between the dynamics and the specific features of integration processes within each REC. Thus the communities will be presented separately, making an attempt to assess the progress and the potential of integration processes within them. Trade flows will be presented only in general – as an indicator of the openness of the economies.[67]

[66] The Maghreb Union (UMA) has still not signed the AEC relations Protocol and since 2012 is not considered a pillar of the Community.

[67] Selected general economic indicators of the 7 RECs are presented in the Annex.

Community of Sahel-Saharan States

The Community of Sahel-Saharan States (CEN-SAD) was established in 1998 as a framework for integration and harmonization with the vision to become a leading organization among the RECs in Africa. CEN-SAD is the largest RECs in Africa with 23 Member States[68], a territory of 13,5 Billion sq. km and a population of 508 Million people. 16 member states are among the least developed countries, and five are landlocked. There are four official languages and the currencies within the community are 19.

CEN-SAD is the largest community in Africa also from an economic perspective – the total GDP is 934 Billion, and GNI – 891 Billion USD. However, there are stark differences within the community – Nigeria and Egypt produce more than half of GDP (at 28%), and 15 countries are with a GDP below 15 Billion, four of them – Djibouti, Gambia, Guinea-Bissau and Somalia, have a GDP of around or below 1 Billion USD. The average GDP per capita is 1840 USD, which ranks the community second in Africa after SADC. According to this indicator as well, however, differences within the community are significant – the highest values for the countries of North Africa (Libya – 9960 USD, Tunisia – 4350, Morocco – 3100, Egypt – 2780 USD), while 13 countries are under 1000 USD, reaching 374 for Liberia and Niger, and only 187 USD for Somalia.

CEN-SAD is the largest community as well in terms of trade flows with a total value of international trade of 563 Billion USD (46% of total trade of the continent). The most significant contribution have Nigeria (165 Billion, 30%), Egypt (99 Billion), Libya (59 Billion) and Morocco (44 Billion). 13 countries have a share of less than 1% of the international trade flows of the community, the most modest (under 550 Million USD, 0.1%) is the contribution of Guinea-Bissau, Gambia and the Central African Republic (CAR). The community as a whole has a positive trade balance of 7,6 Billion USD, due mainly to the major fuel exporters Nigeria and Libya. The biggest negative balance have Egypt and Morocco. Imports and exports occupy almost the same share of GDP – around 30%. The largest share of imports in GDP is observed in Somalia (77%), Liberia (62%), Djibouti and Tunis (around 55%), while the lowest – in Sudan (15%) and Nigeria (19%), although the latter is second only to Egypt in terms of the value of imports (51 Billion USD). The situation is radically different in exports – here leaders are Nigeria (114 Billion. USD, 43% of GDP) and Libya (59 Billion, 94% of GDP), while in some countries (Sudan, Djibouti, CAR), the share of exports in GDP is below 10%.

The great differences between countries within the CEN-SAD as GDP per capita and as general economic conditions (GDP, GNI) and population are not encouraging for the successful development of integration processes. This conclusion is reinforced by the fact that the countries within the community demonstrate radically different degrees of integration in international trade and openness of their economies. Moreover, CEN-SAD is somewhat burdened by the large differences in the cultural and historical development of the countries within it.

The conclusion regarding the weak prospects for the development and deepening of integration is confirmed if one assesses CEN-SAD based on the proposed by Haas and Schmitter criteria – it falls even under the fourth group of integration arrangement, as besides the lack of political will, the membership of all member states other, in most cases more developed integration communities only emphasizes the differences in their economic goals.

Common market for Eastern and Southern Africa

The Common market of Central and Southern Africa (COMESA) was established in 1994 to replace the previous one preferential trade agreement for Central and Southern Africa. The community encompasses 19 countries,[69] 11 of which are among the least developed, and 8 are landlocked. With a total area of 11.6 Billion sq. km and a population of 460 Million COMESA is the second largest REC in Africa.

With a total GDP of 578 Billion and GNI of 561 Billion USD COMESA is one of the three most powerful economic communities on the continent. However, economic disparities member states are very significant. The largest economy in the community – Egypt, although only covering about 18% of the

[68] Benin, Burkina Faso, Cape Verde; Central African Republic, Comoros, Côte d'Ivoire, Chad, Djibouti, Egypt, Eritrea, Gambia, Ghana, Guinea-Bissau, Guinea, Kenya, Liberia, Libya, Mali, Mauritania, Morocco, Niger, Nigeria, São Tomé & Príncipe, Senegal, Sierra Leone, Somalia, Sudan, Togo, Tunisia.

[69] Burundi; Comoros; Democratic Republics of Congo; Djibouti; Egypt; Eritrea; Ethiopia; Kenya; Libya; Madagascar; Malawi; Mauritius; Rwanda; Seychelles; Sudan; Swaziland; Uganda; Zambia; Zimbabwe

population, produces over 45% of the GDP in the community. The average GDP per capita is 1280 USD, but here the differences between countries are even more dramatic – from 12300 USD in the Seychelles and about 10,000 in Libya to only 230 USD in the DR Congo and 270 in Burundi. In total 12 of the member states the GDP is lower than the average for the community, and in 8 of these it is below 50%, while in 4 it is more than three times higher than the average.

As regards trade the community also ranks third among RECs with about 300 Billion USD total international trade, but with the largest negative trade balance of all RECs in Africa, with imports exceeding exports by over 40 Billion USD. In the trade flows also are observed significant differences between countries. The leading position is occupied by Egypt and Libya, with respectively 100 and 82 Billion USD, and the smallest are the trade flows of the Comoros (325 Million) And Djibouti (675 Million), with a total of 12 countries that are below 10 Billion USD. Of all countries, only Libya has a strong positive trade balance – 36 Billion USD. 9 countries have minimal positive or negative values (up to 600 Million. USD), while the largest negative balances are in Egypt (36 Billion), Kenya (10 Billion) and Ethiopia (9 Billion USD). There are also large differences in the share of trade in GDP. The overall share of imports for the community is 30% and of exports – 23% of GDP. The largest share of imports is observed in the Seychelles (71%) and in the Comoros, Djibouti, Malawi and Swaziland it is over 50%. The lowest is the share in Sudan (15%) and in seven other countries it is below 30%. In Libya exports produces almost the entire value of GDP (94%), in Swaziland - 50% and in 11 countries the share is below 15%, in the Comoros and Burundi being even below 5%.

COMESA does not have a great potential for success of the integration process due to significant differences in the levels of GDP per capita. This conclusion is confirmed by the size of the countries - both as population and as economies. The data show that there is a varying degree of openness of the countries in COMESA to trade and integration in international trade, which is a prerequisite for various benefits of integration for each of them, and this in turn is a major barrier to the development and deepening of the integration process.

Opportunities for success of integration within COMESA are weak also from the point of view the model of Haas and Schmitter, and so far the community falls into the lowest of the defined by them categories – the aims of individual countries are similar, but not identical, and the political will to implement them cannot be assessed as strong.

Despite the above said, there are some positive results of the integration process within COMESA, perhaps the most important of these being the Community's accession to the Tripartite FTA COMESA-EAC-SADC in 2012.

East African Community

After existing for 10 years in the period 1967 to 1977, the East African Community (EAC) was re-established in 2000. It brings together five countries,[70] four of which are among the least developed and three are landlocked. The official languages are English and Kiswahili, the number of currencies is 5.

Although it is the most advanced in terms of economic integration, EAC is the smallest of the recognized as building blocks of the AEC regional community with an area of 1.8 Billion sq. km and a population of 149 Million people. The total GDP of the community is 98 Billion USD, and the one of the largest economy Kenya is 40 Billion, while in the smallest – Burundi, it is 2.5 Billion USD. Despite the difference in the size of the economies, GDP per capita in the five countries is relatively uniform – from 270 USD in Burundi to 800 in Kenya, while the average for the community is 662 USD.

The total EAC trade flows are less than 51 Billion USD, which is only about 4% of total trade in Africa. Although values for the individual countries differ, they are relevant to the differences in the size of the economies. This applies both to the values of exports and imports and their share in GDP ranging from 16 to 23% for Burundi and Rwanda, about 40% in Kenya and Uganda to nearly 50% in Tanzania. The share of imports in GDP is about 30% in Burundi, Rwanda and Uganda and about 40% in Kenya and Tanzania, and the average for EAC is 37%. The situation is different for exports where the share in GDP is extremely low – only 15% of the community as a whole, the values reaching only 5-6% in Burundi and Rwanda.

[70] Burundi, Kenya, Rwanda, Tanzania, Uganda

It is not surprising that the EAC is a community where integration processes are the most thorough and most developed. This confirms the hypothesis that countries with similar GDP per capita have higher chances of successful integration among them. Moreover, the countries of the community are close as cultural and historical heritage, which further supports the integration process.

Evaluated within the model of Haas and Schmitter, EAC is the only community in Africa which falls into the first category – communities with a high rating in terms of opportunities for success, having identical economic objectives and strong political will to achieve them, which can be also supported by the fact that with few exceptions the stated political and economic objectives are met on time.

Economic Community of Central African States

In 1986 the member states of the Customs and Economic Union of Central African States and of the Economic Community of Great Lakes create the wider Economic Community of Central African States (ECCAS). Currently it has members 10 countries,[71] six of which are among the least developed and three are landlocked. The official languages are French and Portuguese, there are five currencies, including the Central African CAF.

ESCAS occupies about 22% of the area of the continent (6,6 Billion sq. km). On population (11% of Africa, 121 Million people) the community is the smallest of the recognized blocks of AEC and with the lowest population density – only 83 people per sq. km. The share of GDP of the community in Africa's is similar to that of the population - 10.1%, and its value is 200 Billion USD. According to the size of the economies, countries can be divided into three groups – Angola with a GDP of 114 Billion USD (over 56% of the total GDP of the community), 5 countries with a GDP of 12 to 17 Billion USD (6-10%) and 4 with GDP below 2.5 Billion USD (below 1.2%). There is a great divergence in terms of GDP per capita - on the one hand, Equatorial Guinea is a member of ECCAS, which has the highest value of this indicator across Africa – nearly 28000 USD, making it the 32nd in the world; on the other hand, in the DR Congo and Burundi GDP per capita is less than 300 USD. The average for the ECCAS value of this parameter is 1663 USD, in 6 of the countries it is less than this level. It should be noted that there is a big difference between GDP and GNI (nearly 27 Billion USD), which reveals the serious presence and share of exports of foreign companies in the region.

The total value of trade ECCAS is near 172 Billion USD, and here is applicable the above used division into three groups in which the shares are similar to those of GDP, the largest contribution being of Angola (about 100 Billion USD), 5 countries with a share of 4-12% and 4 – with less than 1% (Sao Tome and Principe, CAR, Burundi, Cameroon). The same is true regarding imports and exports, but one should note that while Angola is among the leaders the continent (respectively 4th and 3rd), Sao Tome and Principe ranks last on both counts, and Cameroon is the third weakest exporter. Among the recognized blocks of the AEC ECCAS is the community with the highest positive trade balance (over 72 Billion USD), mainly due to the fact that almost all countries are exporters of fuels and minerals, here also Angola being the leader with 49 Billion USD, while the four countries of the third group have negative (though small in value) balances. There are also differences in the share of imports in GDP – from 53 percent for Sao Tome and Principe and 42 in Cameroon to only 15% for the CAR. Even greater is the divergence in the share of exports in GDP – in Equatorial Guinea it is 87%, in Congo – 80%, in Gabon and Angola – 65%, while in the four countries of the third group this share is below 10% reaching only 2.9% for Cameroon.

ESSAS is the community that perhaps most clearly demonstrates that size matters for the integration process. Differences in the size of countries (both physical, demographic and economic) are so large that the process of integration in the community is almost stopped. The many conflicts in the region in recent years also contribute to this, which shift the attention of governments from achievement of economic integration goals towards making the ECCAS a peacekeeping organization and forum for negotiations.

This shift of policy efforts and the distancing from the economic objectives set the ECCAS in last, fourth group communities from the viewpoint of the system of Haas and Schmitter, giving it little potential for success.

[71] Angola; Burundi; Cameroon; Central African Republic; Chad; Democratic Republic of Congo; Equatorial Guinea; Gabon; Republic of Congo; São Tomé and Príncipe

Economic Community of Western African States

The Economic Community of West African States (ECOWAS) was established in 1975. It currently has 15 member countries,[72] 12 of which are among the least developed, and three are landlocked. Mauritania withdrew from the ECOWAS and thus (due to the de facto exclusion of the Maghreb Union from the AEC) is the only country on the continent excluded from the framework of AEC. Within the community there are three official languages, and 8 currencies, including the West African CFA.

Although its territory is relatively small (5100 Million sq. km, 17% of Africa), ECOWAS is the third on population among RECS (340 Million people, 32% of Africa). The total GDP of the community is nearly 420 Billion USD. The leading role of the Nigerian economy is obvious with nearly 2/3 of this amount (263 Billion USD). Here, however, should be noted the big difference between GDP and GNI (more than 20 Billion USD) that reveals serious activity of foreign companies in the country. Other major economies are those of Ghana (40 Billion USD) and Cape Verde and Côte d'Ivoire (around 25 Billion each). The smallest (less than 1 Billion USD) are Guinea-Bissau and Gambia. In ECOWAS, as well as in most other RECs, rather large differences in terms of GDP per capita are observed – from 3800 USD in Cape Verde to the modest 374 USD in Liberia and Niger. The average value for the community is 1234 USD, and besides Cape Verde only Ghana and Nigeria have GDP per capita which exceeds it.

Nigeria dominates in trade as well with 62% of the total trade flows, 46% of imports and 73% of exports. The other two countries with relatively higher share in the trade flows are Ghana (respectively 11, 16 and 8%) and Côte d'Ivoire (8, 9, and 8%). The share of imports in GDP is quite interesting – all countries except Nigeria (19%) and Liberia (62%) are in the range 30-45%. Much more serious divergence is present in the share of exports in GDP – from only 10% in Gambia, trough 15-20% in 8 countries and 25-30% in the other 4, to 44% in Nigeria and 50% for Côte d'Ivoire. These are the two countries with positive trade balance, with the fuel exporting Nigeria having so large positive balance (63 Billion USD), that it compensates for the relatively small negative balances of other countries in the community, which as a whole has a positive balance of more than 45 Billion USD.

Although the countries in ECOWAS can hardly be described as identical both as size (population, GDP per capita), as well as as trade features, the process of integration in the community is one of the fastest developing in Africa. Although there have been some delays, here, as in the case of EAC, there is a strong political will to achieve the objectives, which helps deepen the integration process despite linguistic and historical differences between countries.

Intergovernmental Authority for Development

The Intergovernmental Authority for Development (IGAD) was established in 1996 replacing the existing since 1986 Intergovernmental Authority on Drought and Development. It has 7 member countries,[73] six of which are among the least developed, and two are landlocked. Official languages of the Member States are English and French, the currencies are 6. The total area of IGAD is 5200 Million sq. km and the population is 226 Million people, on both indicators the community ranks fourth among the pillars of the AEC.

The community's GDP is 166 Billion USD (8.4% of Africa), which ranks is next to last among the RECs. Furthermore, within the IGAD large differences between countries are observed that allow their division into three groups – the highest GDP being in Sudan (59 Billion USD, 35%), followed by Ethiopia and Kenya (25%) and Uganda (12%), while at the bottom are the other three countries with GDP below 3 Billion USD (2%). The situation is different in GDP per capita, which has relatively close values with few exceptions – the leader here again is Sudan with 1866 USD, followed by Djibouti (1203) and Kenya (808 USD). In the other countries, GDP per capita is less than 500 USD, reaching only 187 USD in Somalia, which is the lowest value in the entire continent.

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[72] Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo

[73] Djibouti; Eritrea; Ethiopia; Kenya; Somalia; Sudan; Uganda

In terms of total trade flows, imports and exports countries can be divided into four groups, the difference with the above is that here leader is Kenya (with 37, 36 and 40%) while Sudan falls into the second group with Ethiopia (respectively 20-25, 20-26, and 20%). Here again Uganda has values of 13-15%, while the other three countries are below 3% on all indicators. Interestingly, while the share of imports in GDP in most states it is within 30-40%, the one in Sudan is only 15%, and for Djibouti and Somalia it is quite high (55 and 77%). Quite different is the situation with exports – all countries are less export-oriented, with the highest values of this indicator being only 15% in Eritrea and Kenya.

Overall the countries in IGAD are quite closed and unintegrated in international trade, but unlike the situation in ECCAS, they are close from the point of view of size of economies. Nevertheless, here the integration process has generally stopped. This is due to the fact that the member states of IGAD are part of more advanced integration communities – COMESA and EAC, which leads to weak political will to develop integration within the community. Hence the conclusion that perhaps the most important factor for the development of integration among developing countries is the political will.

The lack of such and the participation of countries in other communities with different goals and levels of development are the two reasons that place IGAD in the fourth category of integration arrangement in the model of Haas and Schmitter, with little potential for deepening and development of integration processes.

South African Development Community

In 1992 the founded in 1980 Southern African Development Coordination Conference was transformed into a Southern African Development Community (SADC), with a focus on economic integration. It has 15 member states,[74] eight of which are among the poorest in the world, while six are landlocked. SADC is third on area (nearly 10 Million sq. km) and fourth in population (286 Million people) among the building blocks of AEC.

With a GDP of 650 Billion USD SADC is the second among the RECs on the continent in terms of economic size. It is dominated by the economy of South Africa (RSA) with a contribution of nearly 60%, followed by Angola – 18%. These two countries share (10 Billion USD each) the difference between GDP and GNI in the community. 9 other countries have a GDP of about 10 Billion USD or more. USD, and only four – less than 5 Billion. However none of the countries is with GDP below 1 Billion USD. There are huge differences in GDP per capita – from 12300 USD in the Seychelles and 8750 in RSA to only 230-530 USD in DR Congo, Malawi, Madagascar, Tanzania and Mozambique.

Similar to the situation on the value of GDP is the one on total trade flows - the community is second in Africa with 421 Billion USD. Here RSA has the largest contribution as well – 50%, followed by Angola with 23%. Similar are the shares of the two countries in the total imports of the community (57 and 11%), the total SADC imports being 214 Billion USD. The total export value is 208 Billion USD, but here South Africa and Angola are almost equal – respectively 87 and 73 Billion (42 and 35%). It should be noted, however, that the main export product of South Africa are processed products at the expense of fuel imports, while Angola exports fuels and minerals and imports processed products, which is reflected on the balance of trade of the two countries – minus 35 Billion USD for South Africa and plus 49 Billion Angola. The community as a whole has a low negative trade balance – about 6 Billion USD, which is only about 1% of the GDP. Although exports and imports as a share of GDP are about 33 percent of community, interesting differences are observed between countries. In imports the only two countries below the average SADC level are South Africa and Angola, while in some other countries (Namibia, Swaziland, and Botswana) the share is up to 50 and even 70% in the Seychelles. Export has highest share in GDP in Angola (64%), and the lowest – in South Africa (22%) and Swaziland (20%).

Within SADC there are more countries that are at a relatively higher stage of economic development (comparable to other RECs). That, together with the fact that the two largest economies produce interdependent products, are good prerequisites for the deepening of the integration processes. This contributes to the common, though not too pleasant, history, especially in terms of administrative and institutional culture.

[74] Angola; Botswana; Democratic Republic of Congo; Lesotho; Madagascar; Malawi; Mauritius; Mozambique; Namibia; Seychelles; South Africa; Swaziland; Tanzania; Zambia; Zimbabwe

The stable development of the integration process within the SADC does not confirm the hypothesis of the relationship between the size of the integrating countries (as economies and population), the uniformity of the characteristics of consumption (GDP per capita) and the success of integration. From the point of view of the system for combining economic and political determinants of integration of Haas and Schmitter SADC falls into one of the first two categories - with close or identical economic objectives and political will to implement them, which gives it a high rating in terms of the opportunities for success of the integration scheme.

Conclusion

There is a clear distinction between integration processes among developed countries in which mainly classic static and dynamic effects described by the classic and new integration theory are sought, from those among developing and least developed countries where the reasoning, the expected benefits and the clear constrains to the participation in integration arrangements are different. Thus a different theoretical basis must be used to determine the potential of the regional integration agreements between developing countries that takes into account factors as the stage of economic development of the participating countries, the size and openness of their economies, their trade regimes and the patterns in their international trade.

The economic rationale for regional cooperation is particularly strong given the small size of many African countries in economic terms. However, the regional economic communities that are recognised as building blocks of the African Economic Community are too different in terms of their economic development and international trade properties. Moreover, there are great differences between their member states, as well as between the dynamics and the specific features of integration processes within each REC.

This is the main reason for the controversial results of the assessment of the progress and potential of the integration processes in Africa – some of them have high potential for success (EAC, SADC), in others it is mediocre (COMESA, ECOWAS) while the RECs where the integration process is in a standstill (CEN-SAD, ECCAS, IGAD), it could be regarded as low. The main reason for the different results of African RECs is the political will and the commitment to the stated economic goals of the RECs by their members.

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11.* * *, World DataBank, African Development Indicators, http://databank.worldbank.org, assessed on 1.11.2014

African countries – general economic indicators (2013)

	REC membership	Area (mil. sq. km.)	Population (mil.)	GDP (mil. USD)	GDP (USD p.c.)	GNI (mil. USD)	Imports (mil. USD)	Exports (mil. USD)	Trade (mil. USD)	Trade balance (mil. USD)	Exports (% of GDP)	Trade (% of GDP)
Algeria	UMA	2381,7	38,5	205789	5244	203595	46801	73981	120782	27180	35,9	58,7
Angola	ECCAS, SADC	1246,7	20,8	114147	5318	102613	24000	73000	97000	49000	64,0	85,0
Benin	CEN-SAD, ECOWAS	114,8	10,1	7557	802	7512	2200	1400	3600	-800	18,5	47,6
Botswana	SADC	581,7	2,0	14504	8533	14464	8025	5971	13997	-2054	41,2	96,5
Burkina Faso	CEN-SAD, ECOWAS	274,2	16,5	10441	613	10454	3150	2350	5500	-800	22,5	52,7
Burundi	COMESA, EAC, ECCAS	27,8	9,8	2472	271	2463	780	130	910	-650	5,3	36,8
Cameroon	ECCAS	475,4	0,5	1827	1260	1858	766	53	819	-713	2,9	44,8
Cape Verde	ECOWAS	4,0	21,7	25322	3798	24876	7100	4500	11600	-2600	17,8	45,8
Central African Republic	CEN-SAD, ECCAS	623,0	4,5	2184	489	2183	320	210	530	-110	9,6	24,3
Chad	CEN-SAD, ECCAS	1284,0	12,4	12887	918	9752	2600	3900	6500	1300	30,3	50,4
Comoros	COMESA	1,9	0,7	596	810	595	300	25	325	-275	4,2	54,5
Congo, Dem. Rep.	COMESA, SADC, ECCAS	2344,9	65,7	17204	231	16062	6100	6300	12400	200	36,6	72,1
Congo, Rep.	ECCAS	342,0	4,3	13678	3485	10832	5200	11000	16200	5800	80,4	118,4
Cote d'Ivoire	CEN-SAD, ECOWAS	322,5	19,8	24680	1195	23683	9800	12350	22150	2550	50,0	89,7
Djibouti	CEN-SAD, COMESA, IGAD	23,2	0,9	1049	1203	1120	580	95	675	-485	9,1	64,3
Egypt, Arab Rep.	CEN-SAD, COMESA	1001,5	80,7	262832	2781	256347	69813	29397	99210	-40416	11,2	37,7
Equatorial Guinea	ECCAS	28,1	0,7	17697	27478	11051	6000	15500	21500	9500	87,6	121,5
Eritrea	CEN-SAD, COMESA, IGAD	117,6	6,1	3092	482	3064	950	470	1420	-480	15,2	45,9
Ethiopia	COMESA, IGAD	1104,3	91,7	41605	357	41511	12000	3000	15000	-9000	7,2	36,1
Gabon	ECCAS	267,7	1,6	18377	11114	16428	3900	12000	15900	8100	65,3	86,5
Gambia, The	CEN-SAD, ECOWAS	11,3	1,8	917	506	874	380	100	480	-280	10,9	52,3
Ghana	CEN-SAD, ECOWAS	238,5	25,4	40711	1570	38564	18000	12000	30000	-6000	29,5	73,7
Guinea	ECOWAS	245,9	11,5	5632	498	5202	2300	1400	3700	-900	24,9	65,7
Guinea-Bissau	CEN-SAD, ECOWAS	36,1	1,7	822	626	821	250	130	380	-120	15,8	46,2
Kenya	COMESA, EAC, IGAD	580,4	43,2	40697	808	40527	16290	6127	22417	-10163	15,1	55,1
Lesotho	SADC	30,4	2,1	2448	1106	2752	2600	1100	3700	-1500	44,9	151,2
Liberia	CEN-SAD, ECOWAS	111,4	4,2	1734	374	1582	1066	459	1525	-606	26,5	88,0
Libya	CEN-SAD, COMESA, UMA	1759,5	6,2	62360	9957	61985	23000	59000	82000	36000	94,6	131,5
Madagascar	COMESA, SADC	587,0	22,3	9975	465	9686	3050	1500	4550	-1550	15,0	45,6
Malawi	COMESA, SADC	118,5	15,9	4264	365	4139	2350	1300	3650	-1050	30,5	85,6
Mali	CEN-SAD, ECOWAS	1240,2	14,9	10308	684	9808	2950	2150	5100	-800	20,9	49,5
Mauritania	UMA	1030,7	3,8	4199	1190	4066	2800	2500	5300	-300	59,5	126,2
Mauritius	COMESA, SADC	2,0	1,3	10486	8755	10598	5200	2650	7850	-2550	25,3	74,9
Morocco	CEN-SAD, UMA	446,6	32,5	95982	3105	93084	44256	21255	65510	-23001	22,1	68,3
Mozambique	SADC	799,4	25,2	14244	533	14203	6800	4100	10900	-2700	28,8	76,5
Namibia	SADC	824,3	2,3	13072	5383	12716	6750	4100	10850	-2650	31,4	83,0
Niger	CEN-SAD, ECOWAS	1267,0	17,2	6773	374	6656	2900	1500	4400	-1400	22,1	65,0
Nigeria	CEN-SAD, ECOWAS	923,8	168,8	262597	1502	241297	51000	114000	165000	63000	43,4	62,8
Rwanda	COMESA, EAC	26,3	11,5	7103	583	7029	2000	470	2470	-1530	6,6	34,8
Sao Tome and Principe	ECCAS	1,0	0,2	263	1473	261	140	11	151	-129	4,2	57,3
Senegal	CEN-SAD, ECOWAS	196,7	13,7	14046	1119	13865	6440	2510	8950	-3930	17,9	63,7
Seychelles	COMESA, SADC	0,5	0,1	1129	12321	1087	800	497	1297	-303	44,0	114,9
Sierra Leone	CEN-SAD, ECOWAS	71,7	6,0	3796	496	3796	1750	650	2400	-1100	17,1	63,2
Somalia	CEN-SAD, IGAD,	637,7	10,2	1070	187	1300	822	148	970	-674	13,8	90,7
South Africa	SADC	1219,1	51,2	384313	8070	375786	122760	87261	210021	-35499	22,7	54,6
Sudan	CEN-SAD, COMESA, IGAD	2505,8	37,2	58769	1866	56347	9100	3100	12200	-6000	5,3	20,8
Swaziland	COMESA, SADC	17,4	1,2	3744	3831	3454	1950	1900	3850	-50	50,7	102,8
Tanzania	EAC, SADC	947,3	47,8	28242	517	27983	11114	5500	16614	-5614	19,5	58,8
Togo	CEN-SAD, ECOWAS	56,8	6,6	3814	588	3331	1800	1000	2800	-800	26,2	73,4
Tunisia	CEN-SAD, UMA	163,6	10,8	45662	4350	43638	24447	17008	41454	-7439	37,2	90,8
Uganda	COMESA, EAC, IGAD	241,6	36,3	19881	487	16760	5920	2404	8324	-3516	12,1	41,9
Zambia	COMESA, SADC	752,6	14,1	20678	1425	19542	8000	8550	16550	550	41,3	80,0
Zimbabwe	COMESA, SADC	390,8	13,7	9802	757	9420	4400	3800	8200	-600	38,8	83,7

Source: African Development Indicators, World Bank, assessed on 1.11.2014 and own calculations.

PROBLEMS AND CHALLENGES FACING THE CAPITAL MARKETS OF BULGARIA AND MACEDONIA

Julia STEFANOVA[75]

Abstract

The purpose of the report is to analyze the current state of development and the main barriers in front of the effective functioning of the capital markets of Bulgaria (EU member state) and Macedonia (candidate country for EU membership) on the basis of comparative analysis of quantitative and qualitative indicators. The research includes results of empirical testing of main economic factors, influencing the development of the two capital markets. In the course of the research are outlined the main problematic aspects in front of the two capital markets in view of deepening of their integration into EU and the future challenges they face.

Keywords: EU capital markets, integration, EU accession, stock exchanges

JEL classification: E44, F36, G23

Introduction

The regional development and adaptation of the capital markets in Southeast Europe is a slow and difficult process. Progress can be noticed in the harmonization of laws in line with EU requirements. Still the applicant countries for EU membership as Macedonia have introduced only local trading systems on their stock exchanges, while at EU level multiple stock exchanges are in progress of deepening their consolidation. Derivatives trading is in an inception phase of development and initial public offerings are exceptions. At the same time, it is expected that the economic function of stock exchanges is to assess the expected profitability of a large number of listed companies and to evaluate the entire stream of future profits from the ownership of capital. The capital markets of these countries are still far from effective implementation of their macroeconomic functions. Problematic factors facing the capital markets in Southeast Europe remain the limited range of financial instruments and the significant fluctuations in the prices of traded financial instruments. Under development are new financial instruments such as warrants and derivative products, but this process will be long, given the lack of clearing infrastructures for this purpose. With the start of negotiations for accession to the EU the prospects in front of Southeast European capital markets will be to initiate a comprehensive process of adaptation to the European regulatory framework.

The ongoing integration of the capital market of Bulgaria to EU is conducive to the optimal distribution of capitals and is of paramount importance for boosting the economic growth and competitiveness of the country. This process is a result of the mutual operation of the institutional structures and the market forces and it requires further measures by all interested parties to overcome the remaining restrictions facing the capital market of Bulgaria in the integration process. The Bulgarian capital market remains small in size and insufficiently integrated to the EU capital markets at the background of the accelerated consolidation process on the EU stock exchanges. Driving forces behind these processes are the necessity for diversification of revenues generated by the stock exchanges in view of mitigating the risks in the course of the global financial and economic crisis and the subsequent debt crisis in the Eurozone.

Description of the problem. Methodology and data sources

The striving of the EU to encourage stability and democracy through integration in Southeast Europe (SEE) is connected with numerous challenges. A priority in the process of integration to EU is given to the structural changes in the region, establishment of the principles of the free market economy, democracy and the rule of law. From Macedonia, as one of the applicant counties for EU membership, is expected to undertake the preparatory process for integration by development of

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national strategies for economic reforms, fiscal and macroeconomic programme for action, structural reform and competitiveness programs. EU considers that in respect of the SEE region it should adopt a thorough strategy and proper enlargement policy as the fragmented initiatives would not lead to establishment of stable economic growth.

The preparation of Macedonia for full membership in EU requires undertaking an analysis of the current state of the market structure of the capital market of the country (legal base, supervisory and regulatory bodies, stock exchange) and of the market participants (banks, investment intermediaries, institutional investors).

In the course of the ten-years' period from signing of the EU Accession agreement of Bulgaria (on 25th April 2005), the most important place in the adaptation of the country to the European integration is given to overcoming the challenges and conducting proper integration policy directed toward the fulfillment of the strategic goals of the economic development and joining the EMU in the future. The macroeconomic convergence to EU is conducted by applying the strategy of economic catch-up and overcoming the disruption in the social and economic development as regards the EU member states with better economic performance than Bulgaria. This requires further measures to speed up the integration to European markets through encouraging the free movement of goods, services, capitals and labor.

The degree of integration of the capital market of Bulgaria to the European capital markets is based on statistical evaluation of price indicators for financial integration (Stefanova J, 2013) in view of comparing the returns among assets. The statistical analysis includes correlation and regression analysis and testing the hypothesis regarding the existence of integration links between the capital markets of Bulgaria and the Eurozone for the period 2003 – 2013. Following the empirical approach the analysis encompasses integration indicators on the market of government securities, the stock indexes and the banking market.

The stock markets in the Central and Eastern Europe countries are characterized by higher levels of information asymmetries and volatilities according to a research by Syllignakis & Kouretas (2006) and rising degree of co-integration links among their stock markets and the stock markets of Germany and the USA. In the short-term period they find stronger influence of country variables rather than that of common factors for their stock markets. Furthermore, in a research of Kostenarov K. (2012) regarding the modifications of the capital asset pricing model (CAPM) on emerging markets, the author concludes that CAPM and its modifications are hardly applicable to Bulgaria (as well as to Romania and Turkey), due to the very low degree of the determination coefficient and the excessively high error in the modifications. Thus the research proves insufficient degree of development of emerging capital markets as the Bulgarian one.

The main assumptions on which the analysis of integration of the Bulgarian capital market to the Eurozone is based are the following:

- Accelerated process of convergence of Bulgaria to EU after 2007 in accordance with the main criteria for EMU (ECB Convergence Report, 2014), which leads to boost in competitiveness and improvements in the market mechanisms;
- Convergence of the average long-term interest rates of Bulgaria to the Eurozone presupposes the operation of the law of one price and the gradual removal of the legal, regulatory, institutional and other barriers in front of investors for immediate change in the structure of their portfolios;
- Assumed possibility for economic agents to have free access to the capital market in Bulgaria due to the high degree of regulatory harmonization to EU and the application of the single passport principle (in accordance with the definition for financial integration of Baele et al., 2004).

Results obtained

1. The Capital Market of Macedonia

The Macedonian Stock Exchange has been in existance since 1995. Just a year later it became a member of the Federation of Euro-Asian Stock Exchanges (FEAS), thanks to which the Macedonian stock indices were included in the Dow Jones FEAS Benchmark Composite Index and Dow Jones FEAS Southeast Europe Index. In 2006, the exchange introduced its own trading system (Bourse Electronic System of Trading, Bestnet) for information and analysis on the current

state of the Macedonian market in real time. The shareholding structure of the exchange includes banks, insurance companies, brokerage houses and other legal entities. The exchange maintains cooperation agreements with the stock exchanges of Ljubljana, Athens, Beograde, Zagreb, Sofia, Vienna and Istanbul. The main purpose of these agreements is to promote the further development of the national and the regional stock markets. In 2015 the exchange members are 10 and they are banks and brokerages.

The main indicators of the Macedonian Stock Exchange in 2014 have increased as overall turnover pushed up by 63% and reached EUR 141 million. The share of foreign investors in the total turnover is about 40 %. The index of the ten most liquid companies - MBI10 marked an increase of 6.06% as compared to 2013. Market capitalization in 2014 amounted to EUR 1.7 billion and preserved the trend of 2013. Significant growth was observed in the number of listed companies - from 32 in 2012 they reached 115 in 2014, which is a prerequisite for the further increase in the efficiency and liquidity of the market. Free float of shares on the official market is between 15-20% but in 2014 there was no one initial public offering (IPO), mainly due to the high bureaucratic requirements and documentation in this process.

During the current period the Macedoninan stock exchange has reached certain stage of development, but in 2007 speculative capitals entered the market and caused unrealistic growth of the stock prices. On this market only one initial public offering of securities took place since the existence of the exchange, when the Securities Commission began the process of standardization of procedures. The companies listed on the stock exchange are expected to achieve higher transparency and to submit their financial statements and additional information about their business and their strategies. Macedonia is expected to change its regulatory base and to introduce uniform practices for public offerings in line with European directives in the area. This is expected to attract foreign direct investment in the Macedonian economy (N. Ivanovska et al, 2012).

Macedonia has achieved significant progress in developing the institutional and legal framework necessary for the functioning of the capital market. This market is regulated according to the Securities Act, The Law on undertaking of trade by companies and the Law on Investment Funds. The country's capital market has passed through a number of changes in the direction of a higher degree of harmonization with EU legislation.

The Securities Commission was established in 1992. It regulates and supervises all capital market participants that perform operations with securities. It is responsible for the implementation of the Securities Act, the Investment Funds Act, the Acquisitions Act and the regulatory framework for their application. Other responsibilities of the Commission include issuance of licenses, permits, regulations, approval of prospectuses for issuance of securities and others.

The Securities Act defines the classes of securities that may be issued and the conditions for issuance, trading, clearing and settlement. It also regulates the organization, structure and positioning of the stock exchange and the other market participants. On the basis of this law are formulated the supervisory powers of the Securities Commission, as well as the organization and the powers of the Central Securities Depository .

On the other hand, the Investment Funds Act regulates the conditions for the establishment of investment funds, supervision and control of their operations and the process of selecting a custodian bank. The law provides for the existence of open-ended and close-ended investment funds.

In 2001 the Macedonian stock exchange introduced electronic trading system (BEST), which provides continuous trading and in 2002 were set price limits for trade in listed securities on the official market up to +/-10% of their last official price, which aims to limit the high volatility in securities trading. Since 2004, the stock exchange introduced higher criteria for listing of securities **on the official market** and the **unofficial market** is divided into two segments - Market of joint stock companies with special reporting obligations and Free market. New reporting requirements for companies were also enacted as quarterly unaudited financial statements, publication of dividend calendar and notification of significant equity owners of listed companies. In 2005, the stock exchange introduced electronic application SEI-NET as an official and the only way to distribute information to the listed companies.

Since 2006 began a massive influx of capital from regional institutional investors on the Macedonian capital market. During this period, the state actively participated on this market through the sale of state shares in many joint stock companies (incl. The Macedonian Telecom). With the onset of the financial crisis and falling share prices, foreign investors reduced their turnover to minimum historical levels.

In a study of Lazarevski (2014) for determining the influence of foreign investors on the Macedonian stock exchange, it was found that the proportion of explained variance in the turnover of the exchange due to changes in the turnover of foreign investors is r^2 = 91.7%. The high turnover of foreign investors contributed significantly to increasing the overall turnover of the Macedonian stock exchange.

The period since 2005 up to 2009 was the most notable for the development of the Macedonian stock exchange. For for the period 2005 to 2007 the main stock index MBI10 increased 905 %, while in 2011 it dropped 75% from its highest value.

Table 1

Turnover and number of transactions on the Macedonian stock exchange

Year	Turnover in Macedonian denar	% change as compared to previous year	Turnover in EUR	Number of transactions
2004	7.920.484.812	4,77	129.059.279	17.441
2005	8.889.567.513	12,24	145.003.311	32.111
2006	31.017.933.488	248,93	506.999.177	52.930
2007	41.702.320.447	33.45	681.605.232	141.984
2008	12.378.962.326	-70,32	202.057.197	43.353
2009	6.732.333.490	-45.61	109.826.668	34.437
2010	5.842.963.073	-13,21	94.981.398	25.741
2011	13.655.857.674	133,71	221.942.461	23.426
2012	5.600.304.948	-58,99	91.006.149	14.951
2013	3.234.557.987	-42,24	52.502.793	13.585

Source: Macedonian stock exchange

As is clear from Table 1, in 2006 and 2007 the stock exchange recorded the highest growth in turnover, which was mainly due to the entry of a large number of small investors, mostly individuals who invested small amounts in diversified portfolios. 2007 was the most successful in the history of the Macedonian stock exchange and in this year the exchange marked a turnover of MKD 41.7 billion, while the main index MBI 10 reached its highest value of 7,740 index points (Dimitrova et al, 2013). In 2007 trade on the official market constituted 73% of total turnover, while the trade on the segment of public companies - 21%, and trade on the open market comprised only 5%.

The main types of financial instruments traded on the Macedonian stock exchange are shares, euro- and denar-denominated government bonds. Other government securities are usually traded on OTC market. Currently it is not possible to carry out short sales. The majority of traded shares are ordinary and the companies rarely issue preferred shares. All bonds traded on the Macedonian stock exchange are with maturity up to 10 years and a fixed interest rate. The issuers may offer commercial papers and certificates of deposit. At the moment only short-term government securities are traded on the OTC market and according to their maturity they are quarterly, half-yearly and 12-month government securities, but their turnover is very small.

The Macedonian stock exchange calculates two indices - MBI10 and OMB. MBI10 has been calculated since 2001 and it is the price -weighted index consisting of the 10 most liquid ordinary shares, which are chosen according to criteria, described in the methodology of the stock exchange. On the other hand, OMB is the bond index computed since 2006 and has a limited weight of 30% per bond.

The protection of investors on the capital market in Macedonia is provided by maintaining a guarantee fund, which is managed by the Central Depository and is used in the event of failure to complete a transaction, or when the Central Depositary members have no sufficient cash for the settlement of their transactions. This fund is filled by compulsory contributions of the members of

the Central Depository (Komercijalna Banka, 2014). Since 2006 on the capital market of Macedonia has been introduced Corporate Governance Code applicable to all listed companies on the Macedonian stock exchange. On this market also is applied Handbook of Corporate Governance, which has been prepared under the Program on Corporate Governance in Southeast Europe jointly with the Iinternational Financial Coropration during the period 2006-2007. It aims to increase the trust between companies and their stakeholders, to build an environment of accountability, openness, transparency through the application of recognized standards of good corporate governance.

On the primary and secondary markets there are no taxes imposed on new issues. When selling shares, debt securities and shares of mutual investment funds there is a capital gains tax for domestic and foreign citizens in the amount of 10%. Income tax on individuals is a flat rate of 10 % to be applied on realized cash income from dividends and coupon income from corporate bonds. Individuals who are residents of countries with which Macedonia has signed double taxation agreements can be exempt from taxation. Income received by legal persons is charged by withholding tax at the rate of 10% on cash dividends and interest income from corporate bonds. No withholding tax is charged on interest income earned from debt instruments issued by the government or the National Bank of Macedonia. Foreign investors do not face investment restrictions and they have the same rights and obligations as local residents.

The global financial crisis of 2007 had a significant impact on the operation of the Macedonian stock exchange. In the previous two years it registered considerable growth of foreign institutional investors, but with the onset of the crisis they reduced their investments, leading to a fall in liquidity in the trade of securities in the second half of 2008. Yet Macedonia has not been heavily influenced by the first wave of the financial crisis because of the insignificant investments of local investors in synthetic financial instruments. After the second half of 2008 has been noticed a growing pessimism in the expectations of investors and their decisions to invest in securities.

In 2013 the secondary capital market continued its decline in turnover and in the number of transactions, which was due to the reduction of block transactions and also of transactions in shares and bonds. In the same year the stock exchange introduced a new market sub-segment - segment for mandatory listing on the basis of an amendment in the Securities Act. Thus 113 companies fell under the requirement to list their shares on the Macedonian stock exchange. Foreign investors continue to show low interest to the Macedonian capital market and in 2013 were reported net sales of securities by them in the amount of MKD 205 million.

Transactions on the OTC market are rather random and not permanent in nature, as in 2013 only two bond issues were traded on this market.

In Macedonia there are 13 open-ended investment funds, 9 private fund and 5 management companies. The first investment funds were created in 2007 and they are regulated on the basis of the Law on Investment Funds. Among the reasons for the slow development of these investment intermediaries are the high capital requirements for their establishment and the ban on investment in foreign securities and real estate. They can invest only in shares and bonds listed on the Macedonian stock exchange, which severely limits their opportunities to optimize and diversify the structure of the portfolios of these companies. The global financial crisis severely affected the operation and the rate of return of investment funds due to a reduction in stock prices and the fact that their investments are primarily in Macedonian securities. According to a study of Odraklieska (Odraklieska D., 2013) the population has very little information about the activities of investment funds and about the benefits of investing in securities offered by these companies.

Table 2

Correlation coefficients among stock indices in SEE

Stock Index	MBI - Skopje			
	2011	2012	2013	2014
BELEX15 - Beograd	97.3	61. 9	57.1	-18.4
BET - Bucharest	89.2	41.9	-64.8	-65.0
CROBEX - Zagreb	96.6	36.2	83.1	-56.2
EUROSTOXX 51 index	84.7	-20.7	-76.3	-17.4
SBUOP - Ljubliana	88.1	0.8	-14.9	30.6
SOFIX - Sofia	92.4	-53.2	-87.3	68.8

Source: National Bank of Macedonia, 2014

From Table 2 above it can be seen that in 2013 the correlation of the main stock index in Macedonia MBI10 to most regional stock markets continued to decline. These differences in the correlation of MBI10 to the other major indices in the region reflect possible divergences in the behavior of investors on the local market of Macedonia and are an indicator of the low degree of integration in this market with the other regional markets.

2. The Capital Market of Bulgaria

According to a World Bank report (World Bank, 2011) Bulgarian legislation is characterized by a high degree of harmonization with EU directives in the field of regulation of capital markets. In 2014 began the process of introducing the new European regulations and directives (for short selling, OTC derivatives, central counterparties and trade repositories, the directive on managers of alternative trading systems, etc.) which is an important priority for the Bulgarian regulatory authority in the face of the Financial Supervision Commission, as well as for market participants on the capital market of the country.

The new regulatory framework for the capital markets in the EU covers all stages of trade on these markets. It includes trade on regulated and OTC markets, clearing and settlement of securities and significantly expands the scope of financial instruments that are subject to regulation and disclosure. The expected positive effects of the new regulatory framework on the capital markets in the EU are greater access to finance for Bulgarian companies in the course of the closer integration of the Bulgarian capital market to those in the EU. Due to the small size of the Bulgarian public companies and investment intermediaries there is no active interest to them from the pan-European counterparts. From this perspective, yet the regulatory framework for the single passport and alternative trading systems have minor effects on the small-scale capital market in Bulgaria.

In 2014 the Bulgarian capital market remains limited by its size and underdeveloped compared to the Eurozone countries and Central and Eastern Europe member states. In a report of IMF (IMF, 2012) it has been emphasized the need for further development in Bulgaria with a view to increasing economic growth and productivity through further structural reforms. It should also be noted that while the Central and Eastern Europe countries (especially Hungary and the Czech Republic) are at an accelerated process of convergence towards the economic structure of the EU, for Bulgaria the expectations are that the differences compared to the average EU indicators will remain significant (Institute for Economic Research BAS, 2012). Main problematic factors to competitiveness and financial development of Bulgaria remain the high levels of corruption, inefficient effectiveness of institutions and limited access to financing. To overcome these weaknesses in the economic environment of the country in accordance with the Strategic Framework of the National Programme for the Development of the Republic of Bulgaria: Bulgaria 2020 (Council for Development at the Council of Ministers, 2012) has been proposed optimization of the institutional capacities, effective use of financial instruments for start-up and growth small and medium-sized enterprises and implementation of policies to improve competitiveness in accordance with the principles of sustainable development.

In the period after the global financial crisis, the market capitalization as a proportion of GDP preserves the tendency to further decline and by 31.12.2014 it was 11.88% of GDP (Bulgarian stock exchange, 2014), but remains very low compared to the euro area countries (average

indicator of 58.1 % for 2013, Convergence Report, 2014, ECB). The low liquidity is a major shortcoming of the capital market in Bulgaria. It is due to the low volume of shares freely traded on the exchange and the outflow of foreign investors from the Bulgarian capital market in the course of the financial and economic crisis.

The market capitalization for 2014 is BGN 9.7 billion, which is a decrease of 2.05% as compared to 2013. In respect of the indices a tendency to increase has been noted for Sofix by 5,76%, BGBX40 by 4.61 %, BGREIT by 12.08% and BGTR30 by 16.28%. In 2014 the turnover on an annual base reached BGN 759 million, while in 2013 it was BGN 1,521 million. The greatest absolute reduction was observed in the turnover of shares (approximately 55% decrease).

The number of issues of financial instruments admitted to trading in 2014 was 444, down by 51 compared to 2013. The largest turnover was realized on the segment of shares (66% of total turnover), followed by bonds (20%) and shares of joint stock companies with special investment purposes (11%). In sectoral terms 38.92% of the turnover was realized by the financial sector (banks and insurance companies), 31.98% by trade, repair of machines and motorcycles and 16.02% by the manufacturing industry.

With changes in the National Code of Corporate Governance the corporate practice on the Bulgarian capital market was harmonized with that in other EU countries by applying the principle of "comply or explain". The principle requires in the event of failure to apply any of the recommendations in the Code the listed companies to outline the reasons thereof. Good corporate practice ensures the implementation of the requirements for transparency, accountability and business ethics, as well as equal treatment of all shareholders.

Despite the high degree of harmonization of the legal framework and market practices to EU level in Bulgaria continue to operate a number of limitations to the effective functioning of the capital market. In particular at **micro-level** can be outlined:

- low quality of publicly listed companies, resulting in minor volume of freely traded shares;

- small capitalization of listed companies;

- companies with high capitalization are structurally and sectorally important and of interest to major national and foreign institutional investors;

- low liquidity, which leads to higher costs for execution of transactions with certain volume and increases the price volatility.

At the **institutional level** may be outlined such restrictions as:

- the lack of infrastructure for clearing, which hinders the development of the derivatives market in Bulgaria;

- the slow process of integration of the Central Depository to the European settlement infrastructures;

- the major differences of the Bulgarian capital market with developed European markets,

- the lack of political will for change etc.

For the adequate removal of these restrictions the market forces and incentives have the leading and decisive role. The institutional structures are expected to remove still existing legal, tax, regulatory and other barriers as well as to carry out continuous monitoring of the capital market and its participants in order to preserve the financial stability and prevent systemic risks.

Based on performed empirical analysis for the adaptation of the Bulgarian capital market to the EU (Stefanova J., 2013), the following results can be outlined:

• The indicators for the integration of securities markets show mixed results, so that in respect of the Bulgarian and German government bonds was observed moderate correlation in yield spreads. For 2-year maturity Bulgarian and French government bonds were reported weak correlations due to the insufficiently long statistical series. Furthermore, it must be recognized that the Bulgarian government securities have a higher degree of country risk due to differences in the credit ratings of Bulgaria, Germany and France. It is necessary to take into account also the differences in perceived credit risk and liquidity. Lastly, but not least is the poorly developed secondary market for

government securities in Bulgaria, which is an obstacle to liquidity as well as the less developed repo market in the country.
• the indicators for the integration of the stock markets of Bulgaria (stock index SOFIX) and the German market (stock index DAX) reported a strong degree of correlation in the post-crisis period, mainly due to the following reasons: the Bulgarian stock market is using the XETRA platform and this unification of standards facilitates the listing of issues in the cross-border context; Bulgaria is a small country with a high degree of openness of its economy; increasing influence of common data variables from international capital markets during the global financial and economic crisis.
• the indicators for the integration of the banking market of medium and long-term assets and liabilities generally show moderate correlations confirming that retail banking still remains a typical local business in Bulgaria, in which banks maximize their comparative advantages in the local context in order to maximize their benefits. The increase in banking concentration leads to less competitive pricing on loans and deposits to the population. Furthermore, the fragmentation of these markets is explained by the presence of asymmetric information and the significant costs for changing service banks.
In an empirical study (Stefanova J., 2015) of the influence of factors on the development of the Bulgarian capital market (FDI, GDP, interest rates, R&D expenditure, legal rights index[76]) it has been established that only the indicators GDP and the legal rights index are statistically significant to the market capitalization of the stock exchange in Bulgaria. The legal rights index for the period 2004-2014, shows constant value of 9, (which is indicative for more than average level of protection). The correlation coefficient between GDP, the legal rights index and market capitalization on the Bulgarian stock exchange is 0,643, which confirms the presence of medium correlations. On the other hand the determination coefficient estimates that 41% of the changes in the market capitalization of the Bulgarian stock exchange are due to changes in GDP and the legal rights index, while the remaining 59% are influenced by other factors.

A number of other studies (La Porta, Lopez, Shleifer and Vishny, 1996) confirm that investor protection is essential because of the agent problem, and so the countries with low degree of investor protection have significantly smaller in size and depth debt and equity markets. These studies point to a link in the direction from the legal system to economic development. According to Komijani *et al* (2012) protection of shareholders has a positive and significant effect on the development of the stock market and 1% growth rate of the index of investor protection leads to an increase in market capitalization to GDP by 9.542%. The Bulgarian stock exchange has adopted and implemented a National Corporate Governance Code, which guarantees high corporate culture in listed companies. Despite the high degree of legal protection (legal rights index value 9), the country reported high corruption index (Global perception index - value 43, Transparency International, 2014) and highest share of gray economy in Europe (Visa Europe, 2013).

Regarding the impact of GDP on the development of capital markets a number of other studies (Demirguc - Kunt and Levine (1996a), Singh (1997), Levine & Zervos (1998)), also confirmed the positive two-way relationship between economic growth and the development of stock markets in the long period. The Bulgarian stock exchange reported the highest levels of market capitalization during the years in which real GDP grows. Therefore, it is important for the exchange to take advantage of this positive relationship, particularly through measures to attract local and foreign investors (eg. by cross-listing of shares of companies).

The empirical analysis of the integration links of Bulgaria and the SEE region shows strong correlation links with the capital markets of Serbia (correlation coefficient of 0,993), Montenegro (correlation coefficient of 0,966) and Austria (correlation coefficient of 0,915). It has been established that 12 % of the changes in the Bulgarian leading stock index SOFIX are due to fluctuations in the Serbian index BELEX 15, and about 16 % of the changes in the Bulgarian stock index are due to variations in the Austrian and the Montenegrin stock indices. The Macedonian capital market is the only one in the SEE region, which shows weak correlation links with the

[76] The legal rights index is calculated by the World Bank and measures the degree to which legislation relating to collaterals and insolvency protects the rights of creditors and debtors and thus facilitates lending. The highest score of the index is 12, which shows that the legal framework is established in such a way that widens the access to financing.

Bulgaria, Serbian and the Montenegrin markets, and when compared to the stock market of Austria, the correlation coefficient is even negative.

Serious infrastructure problem on the Bulgarian capital market is the lack of a clearing institution, without which it is impossible to develop a derivatives market in Bulgaria. An important strategic objective of the Central Depository is to achieve integration into the European financial markets and to establish links with other depository institutions. One of the main initiatives in this direction is the potential for integration with Clearstream and/or Euroclear. By providing a direct connection to these institutions the Central Depository will have an opportunity to attract foreign investors and to build a more effective structure of its operational costs. In case of a legal merger with another depository institution it is expected to achieve a competitive edge, while the technical merger and the introduction of a single platform is a prerequisite for reducing costs. Since 2010 the Bulgarian Central Depository has a number and BIC for SWIFT, which enables other depositaries to connect directly to it (in 2013 it established a direct link with the Central Depository of Romania). Thus, the Central Depository is expected to increase its compatibility with the participants of the European and regional capital markets.

Conclusions

Macedonia has reached significant progress in the development of the institutional and legal framework, necessary for the proper functioning of its capital market. This market has undergone various changes in the direction of attaining greater harmonization to EU legislation. The updated legal framework guarantees application of the principles of legitimacy, transparency, non-discrimination, competition, safeguarding the rights of investors and legal certainty. Positive factors for the future development of the capital market on Macedonia are the increased transparency of the listed companies, the activities of the investment funds, the favorable tax regime and low inflation. A step for accelerating the integration of Macedonia to EU was taken by the country in 2014, when the stock exchanges of Macedonia, Bulgaria and Croatia concluded an agreement for the establishment of an integrated regional platform for trade in securities with the financial assistance of the European Bank for Reconstruction and Development.

Under conditions of global competition the capital market of **Bulgaria** faces the threat to remain in the “periphery” of the integration processes unless measures are taken at institutional and microeconomic levels for linking the trading systems/merging or entering of the Bulgarian stock exchange into a strategic alliance with a leading regional/ European or world stock exchange. These processes will lead to improved market efficiency, long-term maximization of profits and minimization of average transaction costs for the users of stock exchange services. The prospective strategic alliance or other forms of horizontal integration of the stock exchange operator of Bulgaria would lead to increased transparency of the Bulgarian listed companies and practically would ensure access to greater investor base under conditions of heightened competition coming from alternative trading systems in EU.

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CORPORATE AND PERSONAL FINANCE

ECONOMIC-FINANCIAL OPERATING MECHANISM OF COMPOSSESSORATES FROM TRANSYLVANIA

Cornel ACHIM[77]

Abstract

This paper presents a succinct levers, instruments, means, methods that worked compossessorates in Transylvania. Based on detailed studies of specific legislation, archival materials, statistical and literature, trying to provide a more complete picture of the mechanism by which compossessorates as a form of property specifies contributed to socio-economic development. This mechanism of operation, although it relates to the economic history of Transylvania is topical, and the paper tries to offer some solutions for integrating the organizational forms in the current financial and economic mechanism in Romania.

Keywords: economic and financial mechanism, compossessorates, economic history

JEL Classification: B15, B20, B21, B22, B26

Introduction

The objective of this paper is to present in a succinct history of urban and nobility “compossessorate” records as well as their mode of operation, in the light of specific legislation times. In this paper using archival materials, statistics and information from the literature, in order to try to obtain a faithful image as the mechanism by which these forms of ownership have contributed to the socio-economic development of communities. This mechanism of operation, although it relates to the economic history of Transylvania is topical, and the paper attempts to provide some solutions for integrating the organizational forms in the current financial and economic mechanism in Romania.

Definition

The name "compossessorat" was used before 1848, meaning an associative property, feudal rights over immovable and, jointly and severally, resulting from the division of common property, noble in the same state or their descendants legitimate - rights based on calculating the number and size of each sesia city limits. In a village there, so "noble compossessorat" when it comes to property and common use of the undivided property owners nobles (Istvan Kallay, 1983 "Noble Compossessorat" p 101, Communications archivist, No.54, Budapest).

An early form of this structure is found in sec. seventeenth century and the SEC. XVIII, organization and functioning, it generalizes across Transylvania and Hungary. The name "compossessorat" (compossessoratus) appears in the documents late sec. seventeenth century. Thus, in Bihor county, at a assessments on april 15, 1688, which included the names of serfs, their estates, their offspring (boys), their assets, liabilities, etc., in terms of death or possibility of milling (molendinum), we find that mill Terebes-Chiribiş is in the town of compossessorate - Compossessoribus common (Regestrata. UC 24: 44.1688, land records and assessments, Hungarian State Archives). In a similar document written on September 27, 1697 in the city of Seini, Satu Mare county, we learn oak forest-owners - Sylva Compossessoribus communis (Regestrata. UC 34: 22.1697, land records and assessments, Hungarian State Archives). From an inventory dated 1682 in Hungary, Szalok town, county Szepesi, it appears that the mill and its revenues are from the compossessorate (Compossessoribus molundinum). Also in the area Nemes Buk Borsod county property nobility compossessorate census in 1738, it found that pub and butchery is the compossessorate where fishing is common during floods.

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Assets and income nobility compossessorate

These can be classified as follows:

1. tangible goods that can be divided (divisible) - arable land, grassland.
2. real indivisible, intangible rights - that benefits royal prerogatives: pub and shop keeping, butchers, milling, the right to levy customs and pontoon bridge, the right to organize fairs, etc.
3. real and tangible rights to which their division but not common sharing of their benefits: forests, grasslands, fishing, hunting and if you give in use or rent, the money is divided among compossessors proportionally according to the size and each owned buildable number (Huszty Stephanus, 1758, Jurisprudence Practice, p 271-272, Eger).

The said before confirming a census of the Chioarului Valley nobility compossessorates, written in 1803. We need to know that the district Chioarului (Kowariensis), have a special status called "free Baroni" which meant that this territory not have jurisdiction "Ispanu" (Committees) or other county magistrates. Trials devolve nobility. Noblemen were mostly ethnic Romanian, who acquired the privileges of the ancient kings and princes in exchange for military service. Leading the district is "captain" who resided in the city Chioarului, whose commander was. It was the military and administrative jurisdiction including nobility. For example: "Opidum" Berchez right Innkeepers returned Reformed Church, through a donation older, and so on butcher's right. The city could hold four annual fairs whose benefits were all the church (Molnar Erzsebet Banki, 2007 compossessorates Chioarului noble valley. Conscription witnesses, p 29 Kecskemét, Monumenta museology.)

As said by witnesses ask, given that members of the Reformed were Hungarians, Hungarian nobles here considered that the rights of the parish they are entitled to them (this and depending on the fee you paid in this church, during).

For proporţionalizarea revenues, rights and obligations outside the city resulting from the use of the commons (forests, pastures, meadows, etc.) main standard used by nobles from owners, was "Sesia antiqua" ie buildings and land inside the village. The text shows that the 39 owners nobles, had a total of 27 cube "Sesia antiqua" (aprox.13 ha.intravilan) after which they are entitled 499 arable cube to which they annexed 219 Cube from deforestation. Benefit after meadows obtained by illegal logging amounts to 354 carts of hay. Vineyard of 39 compossessors income is 1,005 gallons of wine.

Another example is the Berchezoaia nobility compossessorate, with 66 nobles, of which 64 Romanian. Witnesses here complain about the smallness "sessile antiqua" due to their fragmentation over time. Were among them nobles compossessors who ruled for just 50th or 60th part of a sessile whole 17 nobles had no estates in the town, which is called "extraneus" ie, they built their homes on estates Out of town (field) occupied illegally. After the six "sessile antiqua" Cube 326 used for plowing and busier abusive tax area cube Royal 339 by deforestation.

"Appertinenţia" Urban sessile (ie the right thing after 'estates antiqua ") was 178 of hay, moreover have cleared and occupied an area of 160 carts. In the chapter "alive" we learn that only two nobles have owned an area that produces about 20 gallons of wine, as a result, in the "Innkeepers" say they have come to be traded, although entitled as noble, instead "also occasionally sells brandy, if the crop year allows" but not always for money but rather are consumed together. The village does not take anyone butchers and if an accident someone in the community is forced to sacrifice cow or an ox when it moves how popular self-help called "hops" through which every member of the community buys some meat thus easing somewhat damage the animal host. By this variant of group work helps community damaging and not least participants "Hops" feast and her animal flesh. Die there in this locality and nobles held their trials as in all the villages of the Valley Chioarului (Molnar Erzsebet Banki, 2007 nobility compossessorate Chioarului Valley, census with witnesses, p34. Kecskemét, Monumenta museology.)

Next we will try to translate the statement of witnesses Preluca, troubled by the increasing number of noblemen: "we also have today more old, even we few older we mention that our village were not more than 10 or 16 houses and were surrounded by forests more. From the grace of God after 40-50 years on our hill nobility multiplied so much that we already have more than 100 households. God knows where we will fit over a year or two possibly not give us a plague-n. "The interesting part is that village, there were only four noble families: Nechita Florian, Prince and Giurgea. Each

had one "Sesia antiqua" and we see demographic growth after the name of the noble owners, conscription: 21 named Nechita Florian were number 54, out of a total of 111 compossessors. This phenomenon of fragmentation of the old estates within city limits, is due largely to the fact that the daughters of noblemen in marriage with elements of social classes below, but, after marriage, were entitled to become nobles full (Molnar Banki Erzsebet, 2007 Nobility compossessorate Chioarului Valley, conscription witnesses, p 44. Kecskemét, Monumenta museology.).

Who could be compossessors?

If I were to give a definition I quote from the book "Jurisprudence practice" of Hustty Stefanus (Eger in 1758) ,, it is legitimate compossessor, who rules by inheritance, by inscribare, purchase or donation (Successio, Inscriptio, empţio, donatio) ". It is conceivable that the serfs, tenant farmers or contractualii (precarii) to be part of nobility compossessorate. Looking more closely at the composition of the compossessorates from Transylvania and the Hungarian kingdom conclude that their members are not exclusively nobles row (as claimed by some researchers) so that at the beginning of the nineteenth century, among nobility compossessorate of Abony (Hungary) we find the name of the great aristocratic families: Dessewfy, Festetics, Orcy, Revay, Radvansky, Hunyady etc. and Others The really are common among the nobility. Instead in Bihor county compossessorate goods from Simian they were owned by a single noble family called Kazinczy - Ferenc Dienes, Juliana, Clara, Joszef and Miklos (Istvan Kallay, 1983 “Compossessorate noble”, p 105, Communications archivist, no. 54, Budapest).

Organizing and conducting of nobility compossessorates

The main organ of the General Assembly leadership was that convenes twice a year, usually from St. George and St. Michael autumn (Compossessorate of Hu Abony.). There were some compossessorates, where the meeting is held once a year but then several days (Hanusfalva Compossessorate, Hungary) (Istvan Kallay, 1983 “Nobility Compossessorate”, 113 p., Communications archivist, No.54, Budapest). Meeting was chaired by the director or compossessor of noble rank highest and recorded minutes of the meeting that was signed by those present. Each compossessor presence was mandatory, invited members and widows who have since died. It can be seen that all was personally present nobility and high-ranking nobles sent their representatives (less family Dessewfy). As is clear from the documents before the meeting participants addressed each with the name "compossessors gentlemen". At these annual meetings and invited could participate, such as lawyers, domain administrators nobility, magistrates etc.

The agenda of the meetings was predetermined themes diversified yet focused around three major topics: 1. The report on the joint income and checking them; 2. Dividing “rates of income" for compossessors; 3. Issues related to joint property.

Gleaned through documents of nobility compossessorates, find the agenda various topics: income building, and the boundaries and limits of land, problems the serfs pay engineers and certain cadastral works, establishment of fees for the use of certain properties, construction of canals, repair roads and bridges or their construction, lease rights royal (butchers, Innkeepers), determining the obligations of the management structure and execution (director, deputy director, secretary, treasurer and their helpers) Gypsy problem, decisions related to the exploitation of pastures, forests and more .

Next governing body, directly subordinate to the General Assembly, the gathering was small (congregaţio particularis) headed by the director, who meet monthly on the first Sunday of the month. Compossessors presences was not mandatory. The agenda was very colorful here: inventory building, construction, maintenance and repair of their (deposits, tenant house, inn and pub etc.), the royal tithe, unpaid taxes, organizing grazing, forest management, hiring officials for compossessorates areas, lending of money at interest and not least the enforcement of decisions of the general meeting (Istvan Kallay, 1983 “Nobility Compossessorate”, 113-114 p., in Communications archivist, no.54, Budapest).

Field of activity and operation law of the nobility compossessorates

In reality, the area of activity and nobility compossessorates sphere of influence was much broader and more complex. A first important activity as the administration of the commons (royal benefits, reporting and revenue sharing, accounting, land surveying and archiving). A second activity was significant as government and public policy communities (village administration, taxes, maintenance of roads and bridges, guild issues, urban planning, civil protection, culture, health, public order and protection of orphans). The following activity which involved compossessorates jurisdiction or arbitration court was noble (or seat noble court cases magistratuale obligations related to land records, land consolidation, adjustment and separation of property, criminal cases and civil lawsuits). A final concern was specific compossessorate Church patronage and protection (construction and maintenance of buildings, church wealth management, payroll and ecclesial teaching in denominational schools etc).

Compossessorates operation was governed by specific laws and well-defined, of which the oldest is the law 69/1715 (Márkus Dezső 1896 "Law 69/1715 'Corpus Juris Hungary) that will govern the evolution of the compossessorates next hundred years. For example regulate the contribution of each common compossessor repairs buildings (castles, castles, mills, dams, etc.) because as evidenced by the content of the law, the reason for the deterioration of these buildings is the lack of involvement of members compossessors repairs required. The law provides penalties of court on combatants. All this law becomes ,, cornerstone "in terms of how sharing benefits proportional to income from royal prerogatives: pub and shop keeping, butchers, milling, the right to levy customs and pontoon bridge, the right to organize fairs etc, and while designating county court judges as a forum to resolve these types of conflicts. first time appearing in this law a clear distinction between private property owners, and common goods, including those from royal benefits.

Another fundamental law is the law 6/1836 (Márkus Dezső 1896 "Law 6/1836 'Corpus Juris Hungaria). This law allowed the proportional division of revenues and obligations. Proporţionalizarea may be required by each compossessor. For example according to this law prohibits the person or pub and shop keeping the house including where until now practiced by some compossessors. At the same time the law obliges the proportional division of income from the pub or inns. If somehow one of compossessors built his own inn, compossessors others are obliged to pay the expenses by revenue proportion is still divided proportionally. The same regulations apply and butchers. In article three of this law, it is planned to ensure the separation of pastures to serfs by the nobles. In reality, this process of segregation extensive pastures will take decades and hundreds of lawsuits will be settled through judicial fora county. The law enables the serfs to express option for segregation pasture received a lot compact with other earths own to deal with noble lord. For jelerii land records, the law provides a sessile bondsman whole eight fellows (Tivadar Petercsak, 2012 "changes of the twentieth century in economic communities peasant ', p 10,. Tradition and innovation in agriculture Hungarian peasantry of the twentieth century, Series IV, re Dániel Ballabás, Eger).

Urbarials Compossessorates

Urbarias Compossessorate is a form of community ownership is resulting from the termination of urbarial relations between nobles and serfs, namely peasants. Linked to the origin of these properties interwar Romanian legislature defines: ,, urbarials are pastures, meadows and forests jobagi former times successors of law recognized as such. " (Regulation implementing the Law for Agrarian Reform in Transylvania, Banat and Maramures of 12 July 1923). Next We will focus more on the description of the pasture compossessorates legislation regulating the organization and operation, and not least economic importance.

Before 1848 nobles landlords with serfs used in common pastures, and animals taking on so-called ”common pasture”. Franz Joseph's socage Patent of 3 March 1853 regulating the situation definitively former serf households by separating them from the feudal nobleman. If the law 6/1836 of the noble pasture segregation of serfs was done ,, if necessary, " ,, if natural geographic conditions allow " or ,, at understanding '(and that's always at the mercy of the nobles) by this patent becomes mandatory separation imperial court by the competition ,, land records ". It took years to decades courts can definitively processes regulate urbarials. Most discussions were

related to determining the area of pasture for serfs and peasants. The law allowed the granting of 4-22 acres of pasture (1 hectare = 0.58 acres), taking into account their quality, having as a standard a whole serf estates. With regard jelerii, patent Imperial took the law 6/1836, ie: a sessile serf peasants from a number 8.

Following regulatory processes socage former peasants and serfs in common use pastures and organized on the archaic model of nobility compossessorates, first and in most cases even took the name "compossessorate" followed by the words "urbarial" or "serfs or peasants of former" or "urbarial compossessorate association" and still many other names that differed from one locality to another.

The laws governing the operation of the pasture urbarial compossessorates

Laws in the field have emerged rather late. It was found that in many places in Transylvania and Hungary, significant areas of pasture were broken and transformed into arable land, with catastrophic consequences on livestock (Tivadar Petercsak, 2012 "of the twentieth century changes in economic peasant communities ", p 10 11 in. Tradition and innovation in the twentieth century Hungarian peasant agriculture, series IV, re Ballabás Dániel, Eger) So the law 12/1894 dividing pastures will drastically limit public (Article 12, chapter I, of law 12/1894) and will legislate organizing communities suburbs. Thus remained compact large areas of grassland that according to statistics weather represented in Transylvania 47% of pastures existing living on 47% of cattle, 32% of horses, 28% of pigs and 33% of sheep (Teodor Maruşca Reflections on the pastoral economy I, in Agricultural Income, no 30/2011). Article 6 of the first chapter of the Law provides that in the undivided common pastures, drafting rules of operation and exploitation of pastures and grazing methods, livestock breeding and ensuring, exclusive task general meeting of interested owners. President of the General Assembly usually must be community mayor and executive body of decisions is the unit owners, ie the politico-administrative town hall (art.8-10, chapter I, of Law 12/1894). All said before, it will be at the expense of co-owners and public administration (mayor) who has the right to levy certain taxes (eg ,, stud fee ") which will regăsii in the budget structure in the institution's own -a separate heading and reuse requirement proceeds, all livestock on the line (article 10, chapter I, of law 12/1894).

In Article 21, Chapter II which covers suburbs, says that the public pasture or compossessoral pasture, local council and the general meeting of owners determined: number animals that could come out on pasture; the order of grazing in vineyards in the pasture; instead of grazing of different species; where grazing is not allowed in terms of veterinary; jobs where you install fountains, trough, shade; budget with grazing animal.

Chapter IX of this law dealing with mandatory community police organization field on the status of this institution agrarian obligations and duties of field and vineyard guards, their remuneration etc.

Law X/1913 which will regulate the legal establishment of the compossessorates, oblige members to organize themselves into associations. We do not analyze in detail the contents of the five chapters of the law, remember only the first relates strictly to the constitution of associations, the second chapter on rights and obligations, the third chapter deals with issues of status and organization, and the last two chapters supervision and control of compossessorates. We must recognize that it is a law very well thought out, well designed and articles on the subject, touching and covering the entire spectrum of compossessorate problematic pasture accumulated over the past 50 ani. This law, which was actually applied after 1926 in Transylvania, with the approval of the Ministry of Agriculture, came into being over 1,000 associates suburbs. (Teodor Maruşca 2011, "Reflections on the pastoral economy I", in Agricultural Income, no 30/2011)

Although the legal organization of the urbarial compossessorates was governed by the laws mentioned above and provided a framework for operating in territory the situation was different from one community to another, being influenced by local factors and older forms of use of land . Land records to the communities remained a good example for hundreds of years experience of joint possesions nobility who still works in many cases, properties and interests in several places, still representing the economic interests of members compossessors.

Economic and social importance of the compossessorates

Economic and social importance of the compossessorates throughout history is undeniable. Members of the urbarial compossessorates were using the forests and grasslands within rights-owners, forest or pasture they held. These may be the number of animals that could leave the pasture or the amount of wood that was allowed to operate. Rights could inherit or sell, but these transactions were allowed only between compossessors members. Transylvania was the village where not to run at least a compossessorate, use of forests and pastures is vital for members of these communities who raise their animals for milk, meat or working on pastures and forests for firewood, construction materials tools, acorns for pig breeding and not least, food for people, venison and berries. For example in the Carei city in the interwar period, functioned six-owners pasture as follows: Lotul Mare Compossessorate with 71 ha of pasture, Composesoratul Haiducilor compossessorate 41.5 ha, Swabian compossessorate 197 ha, Orasul Nou compossessorate 63 ha, Clăcaşi compossessorate 107 ha., Meseriaşilor compossessorate with 56 ha, in total 534 ha of pasture. At the same time the City had 258 ha of pasture in municipal administration of which approximately half was used by colonists Quarter, established under the 1921 Agrarian Reform (Satu Mare County Department of National Archives, the primary fund, file No. 47 / 1936 ,"Canvas with asocaţiunile grazing in Carei, 04.07.1936")

Mostly, Carei economy was agrarian in nature, and most residents living by ensuring farming and animal husbandry. Pastures compossesorates in the first years after World War I, a number of pet owners find 696 to 898 cows, young cattle in 1361, 481 oxen, 43 cows, 839 horses and 681 sheep (DJSMAN fund primary, file 51/1920,"Census animals"). Eight years later, another census shows that we have 968 dairy cows, 284 young cattle, 215 oxen, 20 cows, 829 horses, sheep and pigs 4617. 1999 (DJSMAN, primary fund, file No. 18/1928, ''Census animal''). We note the increasing number of sheep and young cattle substantial decrease reason is simple: profitability. Mechanization and continued modernization of farming, may be the reason to reduce the number of cattle and buffaloes work, their maintenance is costly and burdensome to the requirements of a system working effectively in farming. The constant concern of governments interwar on efficient grassland management, culminated with the law governing the establishment „Efori Pasture", centrally coordinated structure, with the object of coordinating and controlling the activity zoopastorale nationally. On October 11, 1935 "by virtue of paragraph 10 deciziunii Art.XII Min. Interior no.1248 of March 15, 1935", it is, in a local town hall of Carei an "Eforia common grazing" under the chairmanship of Mr. Augustin Ossian assisted by Michael Pak secretary Eforia, the settlers Todea Dumitru and many others'. ((DJSMAN fund primary, file 47/1935 "Carei Eforia'')

Compossessorates were obliged by law to submit annual pasture eforie budget for the current year, to pay taxes and fees specific to the matter works and plan their exploitation of pastures, breeding situation. Eforia grazing often conflicted between media owners, and others.

We gave the example of the compossessorates of Carei, because here we find the whole spectrum of associations typology owners, from the noble (Meseriaşilor Compossessorate), urbariales of former serfs (Swabian Compossessorate and Lotul Mare Compossessorate) and ending with the jeleriale (Clăcaşi Compossessorate). Just as in the Carei, there were in Transylvania hundreds of these old associations of ownership of pastures, meadows and forests, because we wanted through this brief foray into the complex world of Institution Compossessorate to offer a big picture on the importance of economic and social specific property of this form of Transylvania, so unfairly forgotten Romanian economic historiography.

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FINANCIAL ISSUES OF RURAL SUSTAINABILITY - OPPORTUNITIES FOR COMPENSATION

Sorinel Ionel BUCUR[78]

Abstract

Analyze the financial aspects of the sustainability of rural areas in a given area, consisting of entities socio-economic and cultural backgrounds, acquires far greater importance at least from two perspectives: ensuring the preservation and promotion resources specific to each area, but also their combination of the innovative point of view. From this perspective, our analysis on at least two levels: economic and financial heritage of each area and how to preserve resources, in support of economic and financial activities generating added value in rural areas. Based on these considerations, this approach aims to present a series of identity elements specific to each area of a development region, which, coupled with economic-financial information, underlying identify alternative higher recovery potential through efficient use of resources available to stock locally.

Keywords: Rural sustainability, rural economy, interdisciplinary analysis.

JEL classification: R11, R12, Q01, Q57

1. Introduction

The issue of economic processes in the context of sustainable development made over time the subject of much discussion, both about how to combine existing resources locally and hence the degree of performance of results, but also the necessity of devising local development activities very long term. Disparities within the country and between counties, the regions and the macro-development and their effect on the level of performance of Romania abroad were often put in the middle of scientific debate and the factors action of local communities. The present study has as main objective diagnosis of interactive relations and economic and social system combining adaptive modes depending on the coverage of needs for food resources, economic and financial. Based on these considerations, the approach has as main objective to diagnose the extent of the economic and social sustainability in the post-accession of one of the 8 regions, namely South region.

2. Knowledge

The issue did meet food needs over time several studies, both at the level of basic, but policy makers and investment groups with an interest in this field. Knowledge resources, how to combine their territorial disparities allocation is for any decision maker or factor involved in establishing a starting point of investment strategies and more. In an economy with trends visible globalist, where efficiency and competitiveness are very important in winning new market niches, the issue of resources and the allocation of territorial has a special value, large concerns agri competing in developing strategies for combining the drive resource to achieve its strategic objectives.

3. Material and method

To try to realize a radiography degree of economic and social sustainability in the South Muntenia, the present approach was based on data from the National Statistics Institute (INS) by Tempo-Online database. To analyze the available data established statistical methods were used, such comparisons, dynamics and structure the results are presented in tabular form. It should also be noted that if the value indices have resorted to turning them into comparable prices of the last year statistics available to prevent certain improper assessment of incorporating the results of inflation nominal prices.

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For transformation of values in comparable prices last year was used general index of consumer prices. From the methodological standpoint, the analysis takes into account the timeframe 2007-2013, the upper limit is adjusted according to the availability of statistical data at regional / territorial. Please note that measuring the potential for regional (county) present approach took into account a battery of indicators, grouped as follows:

1. demo-economic indicators:
   - *employment;*
   - *number of employees;*
   - *net nominal average earning.*
2. indicators of endowment resources:
   - *land fund;*
   - *animals per 100 ha.*
3. sector performance indicators:
   - *The value of agricultural production;*
   - *The value of total agricultural production per 100 ha of agricultural land per person employed in agriculture, forestry and fisheries.*

4. Results and discussion

4.1. Demo indicators of economic developments in South Muntenia Region

As part of Macroregion III South Region regrouping structure a seven counties with economic characteristics different social, both from county to county but especially in terms of evolution in time, especially in the post -aderare.

As an indicator of labor, employment recorded a total saving period 2007-2013 dropped by 2.2 percent. The same downward trend was recorded in the South-Muntenia (3.8%), the overall level of involution of almost all the seven counties (table 1).

Table 1

Evolution of employment in the country, macroregion, South Muntenia Region and counties components (thou.pers.)

	2007	2008	2009	2010	2011	2012	2013	2013/ 2007
TOTAL	8725,9	8747	8410,7	8371,3	8365,5	8569,6	8530,6	-2,2
Macroregion three	2426,5	2482,7	2380,2	2369,6	2379,0	2421,6	2425,7	0,0
South Muntenia Region	1214,8	1201,0	1159,9	1154,8	1154,5	1182,6	1168,8	-3,8
Argeș	259,7	256	241,6	240,9	241,7	249,4	246,8	-5,0
Călărași	101,5	101,3	96,8	100,2	99,2	100,9	98,8	-2,7
Dâmbovița	202,8	198,5	193,1	193,6	193,3	196,9	193,5	-4,6
Giurgiu	87,6	88,0	86,5	85,2	87,5	89,8	87,9	0,3
Ialomița	100,7	100,1	97,4	95,5	96,0	99,0	97,7	-3,0
Prahova	303,6	302,3	291,4	286,7	284,2	288,3	289,8	-4,5
Teleorman	158,9	154,8	153,1	152,7	152,6	158,3	154,3	-2,9

Source: Calculations based on data from Tempo-Online, INS, 2014.

The same downward trend is recorded on the population employed in agriculture, forestry and fisheries. Thus, in the post-accession period, employment declined by 3.7 percent on the total region, of involution in all seven counties, with a range of oscillation ranging from -1.2% (Calarasi) and -5.3% (Prahova) (table 2).

Table 2

Evolution of employment in agriculture, forestry and fisheries in the country, Macroregion three, South Muntenia Region and counties components (thou.pers.)

	2007	2008	2009	2010	2011	2012	2013	2013/ 2007
TOTAL	2465,6	2407,4	2410,7	2439,9	2442,0	2510,0	2380,1	-3,5
Macroregion three	478,0	460,7	460,9	465,1	466,6	480,8	455,6	-4,7
South Muntenia Region	435,3	424,3	424,9	428,3	429,6	442,8	419,1	-3,7
Argeș	70,9	69,0	69,2	70,9	70,0	71,8	68,0	-4,1
Călărași	48,8	47,3	47,4	50,1	49,1	50,7	48,2	-1,2
Dâmbovița	71,0	69,7	69,8	69,3	70,6	72,5	68,5	-3,5
Giurgiu	46,8	45,1	45,3	45,5	46,3	47,8	45,1	-3,6
Ialomița	45,1	44,4	44,3	43,6	44,2	45,6	43,5	-3,5
Prahova	65,5	64,0	64,0	62,6	63,6	65,9	62,0	-5,3
Teleorman	87,2	84,8	84,9	86,3	85,8	88,5	83,8	-3,9

Source: Calculations based on data from Tempo-Online, INS, 2014.

In the period under review, the number of employees marked a visible process of reducing both the total economy and especially in the agricultural sector. Thus, if the total economy, employment decreased by 1.4 percent per total country, South Muntenia Region marked a drop of 10.4 percent, mainly due specific weight printed Dambovita (-15.6%) and Prahova (-10.6 % in 2013 compared with 2007)

A trend more pronounced reduction was recorded but in the number of employees in agriculture, forestry and fisheries. If the country level, the number of employees decreased by 15.2 percent, South region decreased by 17.3%, the most significant reduction was found in Arges County (-31.6%) closely followed by Prahova County (-27 %) (table 3).

Table 3

Evolution of the number of employees in agriculture, forestry and fisheries in the country, Macroregion three, South Muntenia Region and counties components (thou.pers.)

	2007	2008	2009	2010	2011	2012	2013	2013/ 2007
TOTAL	2465,6	2407,4	2410,7	2439,9	2442	2510	2380,1	-3,5
Macroregion three	478	460,7	460,9	465,1	466,6	480,8	455,6	-4,7
South Muntenia Region	435,3	424,3	424,9	428,3	429,6	442,8	419,1	-3,7
Argeș	70,9	69	69,2	70,9	70	71,8	68	-4,1
Călărași	48,8	47,3	47,4	50,1	49,1	50,7	48,2	-1,2
Dâmbovița	71	69,7	69,8	69,3	70,6	72,5	68,5	-3,5
Giurgiu	46,8	45,1	45,3	45,5	46,3	47,8	45,1	-3,6
Ialomița	45,1	44,4	44,3	43,6	44,2	45,6	43,5	-3,5
Prahova	65,5	64	64	62,6	63,6	65,9	62	-5,3
Teleorman	87,2	84,8	84,9	86,3	85,8	88,5	83,8	-3,9

Source: Calculations based on data from Tempo-Online, INS, 2014.

As an expression of purchasing power, net nominal average earning was registered in 2007-2013 fluctuated total economy compared to agriculture, forestry and fisheries. We mention that in terms of methodology, ensuring comparability of data, it has resorted to using for this purpose their deflationary consumer price index.

Not the same positive trend can be seen but the net nominal average earning in agriculture, forestry and fisheries. From this perspective, the period 2007-2013 is characterized by a visible trend of decrease percentages between -59.8% (overall agriculture) and -65.1% (Giurgiu) (Table 4).

Table 4

The evolution of net nominal average earning expressed in constant prices of agriculture, forestry and fisheries in 2007-2013 (lei)

	2007	2008	2009	2010	2011	2012	2013	2013/ 2007
TOTAL	2138	847	884	848	817	828	859	-59,8
Macroregion three	0	892	910	835	843	890	896	-56,0
South Muntenia Region	2034	836	853	797	793	831	817	-59,8
Argeș	1903	912	893	840	848	890	864	-54,6
Călărași	2213	822	841	861	800	876	896	-59,5
Dâmbovița	2030	940	978	912	896	838	832	-59,0
Giurgiu	2287	745	838	829	799	782	799	-65,1
Ialomița	1978	754	815	671	770	870	725	-63,4
Prahova	1993	816	900	815	862	881	907	-54,5
Teleorman	1679	924	806	796	694	707	765	-54,4

Source: Calculations based on data from Tempo-Online, INS, 2014.

4.2. Indicators of endowment with resources at regional level - core sector performance within the agri-food sector

As an expression of the degree of endowment resources, land and its structure were recorded in the post-accession oscillated and divergent, both of the country and regional / territorial.

In 2013, aprox.2.4 million ha of the total country South Muntenia Region has an area of cca.3.4 million ha, accounting for 14.5% of the total and 95% of the area of macroregion III. As a total area of seven counties, Arges ranks first, followed by Teleorman and Calarasi, the three bringing together 51.4% of the region.

From the structural point of view, South Muntenia Region is characterized by the predominance of agricultural land (70.6% in 2013) are but a slight setback of 0.4 percentage points compared to the base year - 2007. The arable area registered an increase of share in total agricultural area of 2.2 percentage points, i.e. from 70.7% (2008) to 80.9% (2013) (table 5).

Table 5

The evolution of land fund structure in the South Muntenia Region in 2007-2013 (%)

	2007	2008	2009	2010	2011	2012	2013	2013/ 2007
Total	100	100	100	100	100	100	100	0,0
Agricultural area	71,0	70,9	70,9	70,8	70,6	70,6	70,6	-0,4
Arable area	80,7	80,7	80,8	80,7	80,8	80,9	80,9	0,2
Pastures	11,8	11,8	11,8	11,9	11,8	11,7	11,7	-0,1
Meadow	4,4	4,4	4,4	4,4	4,5	4,5	4,5	0,1
Vineyards and nurseries	1,3	1,3	1,3	1,2	1,2	1,2	1,2	-0,1
Orchards and nurseries	1,9	1,9	1,8	1,7	1,7	1,7	1,7	-0,2
Non-agricultural land	29,0	29,1	29,1	29,2	29,4	29,4	29,4	0,4

Source: Calculations based on data from Tempo-Online, INS, 2014.

A worrying trend is encountered but in terms of livestock per 100 ha of agricultural land. From this perspective, the period under review was characterized by a visible trend of decrease, with few exceptions, both counties and categories of animals. Thus, within seven years, the number of cattle / 100 ha was reduced by about 30 percent per total country, while at the level of counties of South Muntenia Region most significant diminishing returns Giurgiu county, approx. 61% (table 6).

Table 6

Evolution of the number of cattle / 100 ha agricultural area in 2007-2013

	2007	2008	2009	2010	2011	2012	2013	2013/ 2007
TOTAL	21,4	20,4	19,1	14,6	14,7	14,8	15,0	-29,9
Macroregion three		16,5	14,8	10,3	10,2	10,1	10,1	-38,8
South Muntenia Region	17,7	16,4	14,7	10,5	10,3	10,2	10,1	-42,9
Argeș	36,9	36,9	37,8	21,0	21,2	21,1	22,2	-39,8
Călărași	8,6	7,4	6,6	5,0	4,9	4,9	4,9	-43,0
Dâmbovița	25	20,8	17,6	16,9	16,5	15,9	15,4	-38,4
Giurgiu	15,3	13,3	9,1	6,9	6,9	7,0	6,1	-60,1
Ialomița	10,4	9,0	7,6	7,5	7,3	7,3	7,0	-32,7
Prahova	20,0	19,1	18,2	13,8	13,8	14,3	15,0	-25,0
Teleorman	14,5	14,2	12,1	7,8	7,4	6,7	7,1	-51,0

Source: Calculations based on data from Tempo-Online, INS, 2014.

The same trend can also be found and in the number of pigs per 100 hectares, with lower percentages, however, the only exception being represented by Ialomita (+ 13.8%) (table 7).

Table 7

Evolution of the number of pigs / 100 ha agricultural area in 2007-2013

	2007	2008	2009	2010	2011	2012	2013	2013/ 2007
TOTAL	75,7	70,8	65,9	59,3	59,6	58,2	58,9	-22,2
Macroregion three		62,1	56,6	55,3	53,1	51	49,3	-20,6
South Muntenia Region	60,4	55,2	50,1	50	49,1	48	47,4	-21,5
Argeș	132,5	129	126	108,8	110,7	113,8	120,8	-8,8
Călărași	43,2	35,6	33,7	32,3	32,6	34,5	35,6	-17,6
Dâmbovița	73,4	60,3	59,4	78,1	75	68,4	61,5	-16,2
Giurgiu	49,5	41,4	32,7	41,6	42,5	38,9	33,1	-33,1
Ialomița	34,8	38,4	36,9	42,9	40,9	40	39,6	13,8
Prahova	107,4	115,4	114,4	75,9	74,3	69,1	75,6	-29,6
Teleorman	52,7	41,2	29,5	34,4	32,6	32,1	32,7	-38,0

Source: Calculations based on data from Tempo-Online, INS, 2014.

An opposite trend occurs in the sheep / 100 hectares. From this perspective, the number of sheep per 100 hectares is part of a growing trend by percentages ranging between + 6.4% (Calarasi) and + 50.3% (Prahova) (table 8).

Table 8

Evolution of the number of cattle / 100 ha agricultural area in 2007-2013

	2007	2008	2009	2010	2011	2012	2013	2013/ 2007
TOTAL	70,9	74,3	76,4	70,5	72,2	74,6	77,4	9,2
Macroregion three		46	46,2	44,1	44,6	45,6	48,2	4,8
South Muntenia Region	43,1	46,2	46,7	44,7	44,9	45,8	47,9	11,1
Argeș	65	72,9	68,5	60,9	59,8	62,3	74,8	15,1
Călărași	37,3	42,9	42	34,4	38,2	37,4	39,7	6,4
Dâmbovița	24,7	24,7	25,8	37	35,6	36,1	36,5	47,8
Giurgiu	30,3	28,3	29,2	27,7	26,8	29,6	27,2	-10,2
Ialomița	38	41,9	43,9	43,4	42,3	43,2	44,4	16,8
Prahova	55,3	66,3	79,8	70,6	75,2	76,7	83,1	50,3
Teleorman	48	44,5	41,3	43,5	41,6	41,6	42,1	-12,3

Source: Calculations based on data from Tempo-Online, INS, 2014.

4.3. Indicators of sector and regional economic performance

As a specific indicator of the agricultural sector, the value of agricultural production in the period 2007-2012 registered a growth trend, both per total country and in the South Muntenia Region. If the period under review, total agricultural output, expressed in constant prices went up by only 2% in the South Muntenia Region witnessing a growth of cca.23%, due to developments in the counties components. Basically, except for two counties (Arges and Dambovita), total agricultural production has risen significantly with percentages ranging from 6.5% + (Prahova) and 110.9% (Ialomita) (table 9).

Table 9

Changes in the value of total agricultural production in the period 2007-20112 (thousand lei, constant prices)

	2007	2008	2009	2010	2011	2012	2012/ 2007
TOTAL	47699916	62117669	52624701	53348579	59861634	48657381	2,0
Macroregion three	8299820	11952845	10018620	10171329	11992849	9993140	20,4
South Muntenia Region	7697601	11278901	9456259	9581355	11427046	9491344	23,3
Argeș	1533460	1770321	1794517	1448189	1666570	1367880	-10,8
Călărași	874133	1707217	1296851	1317263	1776574	1528658	74,9
Dâmbovița	2036431	1963193	1752639	1841194	1891352	1670753	-18,0
Giurgiu	615451	1171719	976274	1046521	1227320	973638	58,2
Ialomița	684765	1566812	1063966	1386917	1740473	1444117	110,9
Prahova	1032022	1496503	1249253	1142507	1281102	1098690	6,5
Teleorman	921339	1603135	1322759	1398764	1843654	1407608	52,8

Source: Calculations based on data from Tempo-Online, INS, 2014.

The 19.5 percent made the South Muntenia Region of the total value of agricultural production are achieved in a relatively equal for all seven counties, with an oscillation between 10.3% (Ipswich) and 17.6% (Dambovita).

Increasing the value of total agricultural production was the effect mainly in the field of plant growth. Thus, within six years, the crop production was increased by nearly 6 percent total country because the South region percentage to be around 48%. The 48 percent increase in crop production are the result of significant increases in six of the seven counties, with percentages ranging from + 6.8% (Prahova) to no more than tripling in Calarasi and Ialomita

At the animal sector, the value of agricultural production falls on a downward trend not only the country but also in the total analyzed region and its counties. From this perspective, the period

2007-2012 marks a decrease in the value of agricultural production by 9.6% to nvel animals of South Muntenia Region, because in profile county, the percentage of reduction to reach the -33.6% (Arges)

A more pronounced rate of decline is observed in the value of agricultural services but from 2007-2012. From this point of view, the reference period is characterized by a noticeable tendency to reduce them, with percentages ranging counties, between -3% (Dambovita) and -89.9% (Prahova).

Per 100 hectares of agricultural land, arable or per person employed in agriculture, agricultural production value has recorded an upward trend in 2007-2012, due to different rates of change of indicators reported.

In this regard, the value of agricultural production / 100 ha of agricultural land has increased the total country with 2.7% for the region-wide percentage to exceed 20 percent, due to changes in a positive sense occurred in five of the seven counties (table 10).

Table 10

Changes in the value of agricultural production / 100 ha of agricultural area in 2007-2012 (thousand lei, constant prices/100 ha.)

	2007	2008	2009	2010	2011	2012	2012/ 2007
TOTAL	324,3	422,5	358,4	364,5	409,4	332,9	2,7
Macroregion three	324,6	468,0	392,4	400,0	472,7	394,0	21,4
South Muntenia Region	314,7	461,5	387,0	393,0	469,8	390,3	24,0
Argeș	444,8	513,8	521,0	424,6	494,9	403,8	-9,2
Călărași	205,1	400,5	304,4	309,9	417,8	359,8	75,4
Dâmbovița	817,8	789,7	705,4	741,3	762,2	674,5	-17,5
Giurgiu	222,0	423,4	353,2	378,6	444,5	353,2	59,1
Ialomița	182,9	418,7	284,2	369,8	464,3	385,3	110,7
Prahova	375,3	544,8	455,1	418,8	470,1	404,7	7,8
Teleorman	184,6	321,2	265,0	280,3	369,7	282,3	52,9

Source: Calculations based on data from Tempo-Online, INS, 2014.

Divided by the population employed in agriculture, forestry and fishing, agricultural production value recorded in 2012 at the level of South Muntenia Region amounting to 214.3 lei, the largest contribution being found in Ialomita and Calarasi. But dynamic viewed except Arges and Dambovita counties, where we witness a visible trend of decrease in the other five counties indicator marks a significant increase, reaching doubling the county Ialomita (table 11).

Table 11

Agricultural production value / person employed in agriculture, forestry and fisheries in the period 2007-2012 (lei, constant prices/ persons employed)

	2007	2008	2009	2010	2011	2012	2012/ 2007
TOTAL	193,5	258,0	218,3	218,7	245,1	193,9	0,2
Macroregion three	173,6	259,4	217,4	218,7	257,0	207,8	19,7
South Muntenia Region	176,8	265,8	222,6	223,7	266,0	214,3	21,2
Argeș	216,3	256,6	259,3	204,3	238,1	190,5	-11,9
Călărași	179,1	360,9	273,6	262,9	361,8	301,5	68,3
Dâmbovița	286,8	281,7	251,1	265,7	267,9	230,4	-19,7
Giurgiu	131,5	259,8	215,5	230,0	265,1	203,7	54,9
Ialomița	151,8	352,9	240,2	318,1	393,8	316,7	108,6
Prahova	157,6	233,8	195,2	182,5	201,4	166,7	5,8
Teleorman	105,7	189,0	155,8	162,1	214,9	159,1	50,5

Source: Calculations based on data from Tempo-Online, INS, 2014.

5. Conclusions

Since accession to the European Union, Romanian agri-food sector still faces many structural problems and adapting to the demands and rigors of integration into the European community. The effect of these changes was passed both on the level of productivity and efficiency of production achieved but mainly on the living standards of the population. Achieving analysis at regional level meets the need of knowing the degree of endowment resources, efficiency and productivity of a region, the counties of its components as a starting point in building strategies for local sustainable development, integrated into the extensive process development nationally. The present study focused on the analysis of the South-Muntenia led to the detachment the following conclusions:

1. Counties increased heterogeneity related South Muntenia Region in terms of caracterististicilor generated by spatial location; four of the seven counties are located in lowland area, tilting the balance more towards development activities in the sphere of crop production; a wider range of alternatives is reflected in the other three counties, Arges, Dambovita and Prahova, which, due to territorial location, including both plains, hills and mountains, gives them a noticeable advantage in identifying niches alternative local development ;2. A common feature of all seven counties a declining population is stable in 2014 compared to 2007, the percentages range between -1.7% (Dambovita) and -8% (Teleorman); one of the reasons for this can be attributed to population migration to counties with a higher degree of development and diversified employment opportunities for work; this downward trend stable population is more visible in plain counties (Calarasi, Ialomita, Giurgiu and Teleorman), while the other three counties the percentages are lower, giving them a possible trend of relative stability of the population;

3. Changes in the agricultural sector after 2007, due to the need to respect European criteria required for accession to the EU, but also a reorientation towards other business segments generated a sharp decline in the number of employees in agriculture, forestry and fisheries, generally valid for all seven counties of the South-Muntenia, with percentages that ranged in 2013 from 2007 from -7.2% (Teleorman) to -31.6% (Arges);

4. Land structure reveals the possibility of developing activities be inclined to crop production or, in other cases, to animal production, tourism, logging, manufacturing; Four of the seven counties (Teleorman, Calarasi, Giurgiu and Ialomita) hold a share of the total arable agricultural area of over 90%, with percentages range between 91.4% (Teleorman) and 96.7% (Calarasi); a potential arable significantly correlated with the trend of relative stability with time, gives counties the ability to identify those local development of alternatives to the crop production through optimal use of existing resources; in contrast, in Arges, Dambovita and Prahova ratio of arable and other land use categories confers enhanced opportunities to diversify their activities both in the sphere of food production, tourism or manufacturing;

5. Regress in the livestock per 100 ha of agricultural land; basically, except sheep and goats, in which there is a growth trend in five of the seven counties, all other categories of animals recorded significant decrease; otherwise it is worth worrying trend of reducing the number of cattle / 100 ha of agricultural land, with percentages ranging from 25% (Prahova) and -60.1% (Ipswich) in 2013 compared to 2007;

6. Expression of the degree of efficiency of agricultural production value recorded in 2012 in the South Muntenia Region an increase of 23.3% compared to 2007; basically, with two exceptions, Arges and Dambovita, the other five counties are characterized by an increasing trend of the value of agricultural production; the 23.3 percent increase recorded oscillations are the effect of the structure of production value; ie the trend accentuated by increasing crop production has mitigated the falls recorded at the value of animal production and agricultural services.**7**. Reported to agricultural land, arable land per person employed in agriculture, forestry and fishing, agricultural production value enrolled in most counties on an upward trend, mainly generated pace in May accelerate production growth compared to fluctuations reduced farmland / arable and those of employment.

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APPROACH TO THE STRUCTURAL INSTITUTIONALISM

Mihail DIMITRIU[79]

Abstract

The reality today highlights the need for state intervention in the economy agent, but supported and in collaboration with academia and private economic environments in order to prevent and mitigate structural imbalances, and the flattening effects of a fluctuating economic cyclicality.

This complies with the spirit logic of economic organization, to reduce the vulnerability of the entire business environment and finding answers point for maintaining and enhancing the performance of the national economy and, consequently, the business environment under current conditions they pervades humanity.

Keywords: institutionalism, knowledge economy, economic policies

JEL classification: A11, B15, H11, G28

1. General theory of institutionalism

Focusing on analysis of current thinking and practice economic institutionalism, we consider this research useful manifestations of so-called neoinstituţionalism which has as a starting point for development and how property rights are organized and respected.

We come again to reinforce the idea that runs through the current political economy, namely the polarization of economic activity between extremes: a. All for the state and through it and b. All for individual and business activity. We say this, given the assertions of an important representative of neoinstituţionalismului, J.P. Olsen, who distinguished the following models of the existence of the State[80]:

a. a sovereign state, namely one center of power that drive business through reliable and accurate instruments;

b. State citizens moral community, in which, guided by ethical precepts, citizens are directed to achieve the common good, ie the general interest;

c. State classical liberal vision in which the state must exercise its role minimal, or be independent of private economic agents;

d. State segmented, as an entity (institution) complex, comprising interest groups and the centers of power and lobbying are characteristic.

According to the mentioned concept, it is the state that builds the nation's wealth, but it can become a brake or wasteful of this wealth by using part of it useless in a society.

Turning to the views expressed by economist home Icelandic Thráinn Eggertsson the economy neoinstituţională[81], to say that for this application transaction costs exceeds nature of the firm becoming applicable to other forms of organization and practice of the market, it is considered an illustration of action Economy Neoinstituţionale by the fact the relative advantage of alternative contractual forms are due to the existence of transaction costs exactly. For reaching the state's role in the new economy expected to highlight an indissoluble link between it and property rights, lack of state action leading to the possibility of galling ,, "complex system of economy due to the existence of a high level of transaction costs. Not to recall the opportunities for transaction costs analysis on representative government and democratic institutions of our times.

Institutionalism that we want to highlight and which will support the undertaking does not refer primarily to the legal rules governing the actions and behavior of individuals, companies,

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[80] Hoanţă, Nicolae – *Economie şi finanţe publice*, Ed. Polirom, Iaşi, 2000, pg. 63-64.

[81] Eggertsson, Thrainn –*Economia neoinstituţională*, Ed. Cartier, Chişinău, 1999.

government and private, that are part of comprehensive school concept in the organizational system. He takes into account the economic and social categories and tools specific economic systems, laws, beliefs, ways of thinking, etc ..... In the equation, the focus is on institution entrepreneurship, economic agents involved, but also the state, for resolving the various issues raised at the community, regional, national, regional, socio-economic areas and sectors vital to the smooth running of the whole system.

2. Knowledge economy

As is known, the Lisbon Conference of 2000 drew so-called "Lisbon Strategy" which stipulated that in 10 years (ie until 2010), the EU economy is the most competitive in the world. Unfortunately, today the EU is still far from the target. Moreover, the US and Japan had higher increases. The Lisbon strategy involves an economy based on innovation and entrepreneurship prominently. Or, a Europe faced with discussions about their own values, a Europe that is struggling even ideological Anglo-Saxon capitalism (more libertarian) type Rhine / Nordic (more capital) - the meanings given by Michel Albert - and Member lower (belonging and former communist bloc east European demanding and more rights in the building original supra-called European Union is an economic space-socio-cultural entrepreneurship is often blocked by bureaucracy and taxation burden (however necessary to achieve the specified social protection). We are in a period of analysis and reconfiguration of values, priorities and strategies, all dressed in manifestations financial and economic crisis.

But to achieve economic growth and standard of living, it needs Europe to stimulate innovation and entrepreneurship. Otherwise, on the one hand gap with competitors will increase and, on the other hand even innovators and entrepreneurs will migrate to more favorable economic space, easy work in a globalized world, evolving in certain parameters of normality.

Entrepreneurs are those who come up with ideas and investors (which can be entrepreneurs themselves) are the ones that come with the funds. Most commonly, as observed in economic practice, investors are distinct persons entrepreneurs. Because economic action to be profitable, it is necessary that the investor (investors) to believe in the idea emitted outlined in the business plan. But each act in a certain field, a field that should progress. And progress, it requires constant innovation, ie, the act that endows resources with a new capacity used to create wealth, to highlight the scope for action and resource discovery attractive economic system.

Structural policies that we are called to highlight and we believe that we create can be amplified and made more efficient and entrepreneurs action. Development and progress of a sector of a specific field of activity, depend on how firms, companies manage to increase the quantity and quality of supply of goods and services, to ensure its changing operational, depending on the requirements expressed by purchasing power on the market. So, in implementation of structural policies it is essential to ensure the smooth functioning of the existing socio-economic system and permanent improvement to the demands expressed. Higher demand leads to task for entrepreneurs and the entire corporate management to provide goods and services continuously improved and always attractive, as the flexible ways to purchase them.[82].

3. Economic policies. Their need

For starters, we want to build the concept of economic policy and one of the most significant and comprehensive definition, we believe, it is what belongs to Professor Victor Jinga and capture economic policy as part of science and economic management study and apply various forms and multiple effects of state intervention and public law institutions in other situations and domestic and international economic relations of a country, indicating solutions and the means best suited, given the particularities of that economy (our completion).

Economic policy is implementation, implementation, programs and decisions made by state institutions to achieve macroeconomic goals proposed. As a result, economic policy concerns and

[82] How, for example, in the nineteenth, the famous American inventor and entrepreneur Cyrus McCormick introduced instalment payment of goods purchased, in order to meet the wishes expressed but also to meet the real purchasing power of beneficiaries of its products.

applies to both branches and areas of the national economy, such as industry, agriculture, services, transport, trade, and economic institutions like banks.

So is the whole economic policy decisions of public authorities to guide economic activity in a way deemed necessary by a country. Its objectives make up a magic box: growth, employment, prices and external balance issues that we drill down analysis and subsequent synthesis, which we will achieve in this paper.

Economic policy is achieved through arbitration, the arbitrator actions of the state as an economic agent and could be circumscribed within a network of complementary or competing objectives and instruments. The state is considered to be in, but also outside the economy, acting on it as it deems necessary and reacting in terms of costs and benefits. Other economic: producers, consumers, bidders and applicants for employment, reacted in an appropriate way in relation to the information and decisions are transmitted.

By using specific tools and instruments in order to achieve the full range of proposed objectives, it can reach the quintessential economic policies, namely the existence of achieving welfare. Making a mere reference to the principle of efficiency of Robert Mundell, he argued that economic policy must use every means or appropriate tool, depending on the purpose for which it has a comparative advantage (just so that the theory of David Ricardo) to other instruments [83].

Prosperity collective to be achieved it envisages firstly achieving a climate socio-psychological incentive and cohesion, as well as finding a joint economic optimum relations and interactions in nature positive, constructive, of the units components of the economy market, economic agents in the case and the state, which must redefine its place and role in the economy taking shape at the beginning of the third millennium ie new knowledge economy.

Swedish experience from viable economic policy, we can say that most of what capitalism creates, distributes state. We talk on the part of saving and investment, the principle of maximizing economic efficiency by pursuing, obtaining and strengthening the image profit, on the other hand, the need for capital accumulation as genuine financial basis of the investment process and the default factor of economic development, redistribution of income and assets in order to achieve social goals (social justice) and of preserving and reviving the environment.

Especially now, given the crisis and braking mechanisms and levers in the market economy, we refer mainly to international trade relations, this will require the adoption of economic policies in the medium term - 5 years old-, as are national plans of developed countries, but also emerging. But not just any economic policy, but a structural one, affecting vertical and qualitative manner activity in a specific area or sector of the national economy.

Starting from the views expressed by the late Peter Drucker in ,, Innovation and entrepreneurial system ", we believe that the successful design and implementation (a means effective) economic policies, including structural, it is necessary to consider the principal sources of innovative thinking and to ensure beneficial change, such as:

1. Endogenous sources of firms:

-decisions under risk and contingency

-incongruency attention to the manifestation of the real economy and its simulated projection

-changes that are occurring in the analyzed both the domestic and the external market.

2. Macro-economic exogenous sources:

-demographic

-trends in the structure of national economies, but and world

-follow the main processes and phenomena that have major implications for macroeconomic, such as unemployment, inflation.

[83] Cabannes, Michel – *La politique macroéconomique*, Armand Colin, Paris, pg. 5

The reality today highlights the need for state intervention in the economy agent, but supported and in collaboration with academia and private economic environments in order to prevent and mitigate structural imbalances, and the flattening effects of a fluctuating economic cyclicality.

This falls in line with the logic of economic organization, to reduce the vulnerability of the entire business environment and finding answers point for maintaining and enhancing the performance of the national economy and, consequently, the business environment under current conditions they pervades humanity.

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DECISION MAKING AND PERFORMANCE AT THE MICRO LEVEL

Mihail DIMITRIU[84]

Abstract

Interested in our approach matters related to revealing how the manifestation of state involvement in the economy generate certain levels decisions regarding the management of private companies, more or less judicious.

Basis of a decision occurs after a certain algorithm, building on certain signals coming from environmental interference internal-external environment company.

Every company wants highlighting the strengths, mitigate weaknesses, exploit opportunities and avoid the threats direction. Of course, the mechanism works great when the whole market moves by its own economic rules, with a low degree of involvement of public authorities.

But when the state intervenes in the economy in various forms are disturbances to the private sector, or rather, managers will take certain decisions that, in other circumstances, would not be adopted. The paper will identify the types of companies that use public funds to finance activities in different proportions, using our relational strategies, trying to identify factors in the environment that impact upon economic policy decision-making process at the micro level.

Keywords: decisions, businesses and state, partnership

JEL classification: D71, D73, D78

A. The state's role in economic life

Appeared many thousands of years ago, the state has fulfilled its role with an important political and economic role. Over time, its functions, particularly economic ones, have expanded, diversified and have perfected. "Remodeled or even downright again - underline Fernand Braudel - State remains what it has always been - a sheaf of functions and powers defined, even if the means in their case, is always changing".[85]

By the mid nineteenth century, the state was imposed almost exclusively as "State-Referee", as "State-gendarmes" as "State-watchman". According to some Western economists, government intervention is very old, starting from antiquity. Following a lengthy process of evolution - with ups and downs - was enough for government to play a very important role, resulted in numerous functions and actions. The creation of national states in the modern era involves strengthening government to actively intervene in the economy not only to finance the costs of functions becoming more complex but also to regulate in detail the conditions of production and trade. Given that the markets were less developed and rarely interconnected, he could not trust a autonomism to perform the function of the orientation of production and trade.

Development of productive forces of the late eighteenth century requires more flexible mechanisms to address productive resources and more flexible regulations. During the nineteenth century it was observed development of a profoundly liberal economy contrasted sharply with the regulations framed by the previous centuries.

Thus, in terms of economic thought have emerged two trends diametrically opposed: liberalism, which is characterized by non-interference of the state in economic life and dirigisme, state interventionism.

Classical liberal doctrine reflects the concepts prevalent in the ascendant period of capitalism. Father of the theory of liberal Adam Smith, considered the precursor of classical liberal school. In

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[85] Fernand Braudel, *Jocurile schimbului,* vol. II, Editura Meridiane, 1985, p. 195.

1776, he published in London first treaty expanded the economy: "Wealth of Nations, Inquiry into the Nature and Causes" [1], summarizing the many schools of thought up to him from the Physiocrats French, synthesis constitutes the starting point of classical political economy. He criticizes the commercialism that dominates economic thinking for two centuries, gave rise to an intervention and protectionism both economic and military assets to the newly established nation states.

Adam Smith enunciate famous allegory of "the invisible hand". According to this theory, which is based on personal interest, economic activity must take place in accordance with the principle of "laissez faire, laissez passer, le monde will of his meme", aiming to avoid any interference by public authority may disrupt private initiative, free competition, the objective laws of market action. Economic activity should remain the preserve of private enterprises - capitalist, any state participation in economic life is considered contraindicated.

A famous dictum that "government is the better since governs least. Political power - writes Ludwig von Mises - must do everything that was intended and which require. Political power must protect individuals against violent attacks and fraudulent villains and must defend the country against foreign enemies ".[86] However, such a government have three important functions: maintaining internal order and administration of justice, national defense and public works administration.

The liberal doctrine was triumphant, but not for long in England, the US and partly in France. However, organizing "war economies" monopoly power of large industrial enterprises and other factors have led to the resumption of the dispute on the role of the public sector.

Milton Friedman explained very clearly the role of government in the new economic context: "A government called to maintain law and serve as a tool with which we can modify property rights and other rules of the economic game, to settle disputes about interference rules, enforce the performance of contracts, promote competition, offer a monetary framework, engage in activities to counter monopolies technical and overcome the "neighborhood effects" seen largely as sufficiently important to justify government intervention and to complete individual and family charity in protecting individuals irresponsibly - either fools or children - such a government would obviously fulfill important functions. "[87]

However, the great crisis of 1929-1933, expanded on a global scale, demonstrated that self-regulation of the economy is no longer possible. The solution found at that time to overcome the dramatic consequences of the economic crisis, the economic mechanisms disturbance was massive intervention of the state, whose supporter was J.M. Keynes.

"Interventionism - says Ludwig von Mises - occurs when the government does not limit activity to maintain order or - as they used to say with a hundred years ago - the" production safety ". Interventionism means that the government wants to do more, it wants to intervene in the market going. "[88] Aware of the catastrophic effects of the economic crisis of 1929-1933, Keynes criticizes governments for policies implemented violent.

Keynes gave the state a new mission, which is to restore economic balance and to ensure full utilization of the workforce through appropriate measures, political, fiscal, social and monetary. Keynes advocated by state intervention has gradually become the characteristic feature of the economic policy of developed countries.[89]

1945-1980 period marked the triumph of Keynesian ideas and practices. All industrialized countries have practiced a "pilot" of the economy in order to ensure maximum growth.

Following the crisis triggered in the early eighties, there is a tendency to see in excess of interference origin of all economic difficulties. From now on the forefront lies deregulation, deplanificarea, ie "less state". Ideological turn is taken by the Anglo-Saxon countries as a result of elections Margaret Thatcher (1979) in England and R. Reagan (1980) in the US. With them put in

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[86] Ludwig von Mises, *Capitalismul şi duşmanii săi. Ce înseamnă laissez-faire?,* Nemira, Bucureşti, 1998, p. 51

[87] Milton Friedman, *Capitalism şi libertate,* Editura Ştiinţifică şi Enciclopedică, Bucureşti, 1994, p. 50

[88] Ludwig von Mises, *op. cit.* p. 53

[89] Neculai Clipa, *Economie politică*, Editura Sedcom Libris, Iaşi, 1999

place programs to reduce the role of state (deregulation, privatization), to promote economic offer (programs to reduce taxation, liberalization of markets), challenging part of the welfare state, monetarist economic practices.

Of course, it can not perceive the current economy without some degree of manifestation of state interventionism. The reasons are multiple, as are well known in literature and economic practice. In general, the main instruments through which the State acts in the market are: legislative regulations, ownership, budget and tax system. In essence, the state bases its actions on several considerations: fix the rules in the economy, intervening directly and indirectly, coordinates the country's finances and a large part of investments, ensure national income redistribution and monitor growth.

B. Decisions by Romanian companies

Performance targets to ensure the microeconomic decisions. The decision is an essential management tool is its most important specific expression. The quality of the management unit is manifested best by decisions developed and applied.

In literature there are a variety of definitions of the decision. Based on data provided by previous decisions, so the decision was made definition: the decision is chosen course of action to achieve one or more objectives.

Examination of this definition, it follows that the decision necessarily involves several elements: one or more targets; identifying more options for targeting; choosing or selecting the optimal variant.

Management is of interest primarily managerial decision, which can be defined as that decision has direct follow on actions and behaviors of at least one other person.[90]

At the management level of enterprises, the need for a decision arises when the subsystem led identify a problem that needs a solution. If the phenomenon was provided variants of solutions are prepared, otherwise they must be found and implemented in a timely manner. Example of decisions: buying a certain type of machine; changing supplier; the siting of a new department etc.

Managerial decision substantiates the effective use of available human and material resources to achieve the objective. The main purpose of Managerial Decision is to harmonize objectives with the resources, in terms of obtaining maximum efficiency.

Investigations have shown that the most important constituents of decision situation are:

- Factor of decision-making or decision-maker, represented by a manager or a managerial body, by virtue objectives, tasks, powers and responsibilities circumscribed adopt the decision in the circumstances;

- Decision-making environment, consisting of all elements of endogenous and exogenous firm, which make up the decision-making situation, characterized by displaying significant direct and indirect influence on the content and results of managerial decision.

As regards the external environment of Romanian companies, we are seeing develop opportunities but also the difficulties they face, arising from the specific features of the current environment: globalization, which strengthens competition; broadening the range of services offering provides opportunities to capitalize on the knowledge and creativity without major investments; exploitation of knowledge; the relationship between competitiveness and size of the undertaking, which is not necessarily directly proportional; permanence of change.

The most important consequence of the changes occurring in the external environment is the increasing number of decision options and restrictions, with the multiplication of interdependencies between them. Thus, the development environment absolutely necessary evolution makers, whose capacity management and problem-solving potential to keep pace with changes in the external environment of enterprises.

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[90] Monica Voicu, Costache Rusu, *Bazele managementului*, Casa de Editură Denus, Iaşi, 2005, p. 149.

At the same time, and the internal environment of the enterprise known mutations, effective compliance plan more powerful and growing scale decision-making processes with resources, processes, structures and culture. Among them, particularly decision-making culture has an impact, its effect on the evolution of the company.

Making, the primary factors enter into the decision interdependencies, which is reflected in characteristics decision situations they generate. Mainly, there may be three situations [91]:

- *certainty* - characterized by maximum likelihood to achieve the objective using the expected manner. Elements involved when decisions are of the controllable variables, their characteristics are known, and developments can be anticipated accurately;

- *uncertainty* - when the likely achievement is great, but the manner in which to do serious doubt. Such statements involve a number of variables, with few exceptions controllable, some insufficiently studied, hence the approximate anticipation of their evolution;

- *risk* - when the goal is attainable, with a probability of achieving appreciable, but there is great uncertainty regarding the most appropriate ways forward. A considerable part of variables are uncontrollable and even some tooth development is difficult to predict the controllable variables.

Reality has shown that the Romanian companies producing both decisional situations of certainty and uncertainty and risk.

Primary factors in the decision presents the complex and accelerated, generating a multitude of situations decision, what specific forms in each company.

Besides the primary factors should we consider the following factors in the development of managerial decisions that affect their quality:

- Factors known (information, restrictions, influences);

- Factors of uncertainty and risk;

- Managerial knowledge and experience of the decision maker;

- Adaptability;

- Motivating the decision maker.

Quality of management decisions depend on the quality of information collected, the degree to which they use mathematical optimization decisions and decide the level of readiness.

For a decision to be effective, must meet several requirements of rationality:

-To be scientifically;
-To be taken by the body or the person legally entitled to take it;
-To be taken in time;
-To ensure efficiency and unity of action;
-To be simple and clear;
-To not be contradictory.

The environment in which the business operates is complex and constantly changing, the decision is more difficult. In practice, situations arise that management decisions are inadequate due to a lack of clear objectives, insufficient information or incomplete information, establishment of a small number of variants decision neantrenării direct subordinates in decision-making, lack of creativity, etc.

Decision-making approaches can be grouped according to their character and usefulness into two main categories: descriptive and normative.

Presents descriptive theories of decision making process as it is done in reality, the enterprise's management, using concepts and management concepts to surprise and playback scrolling mechanism. This concept fits Cyert American professors and March, whose theory deals with

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[91] Ovidiu Nicolescu, Ion Verboncu, *Fundamentele managementului organizaţiei*, Editura Tribuna Economică, Bucureşti, 2001, p. 159

decision-making process as a whole, highlighting a number of elements that determine its characteristics, with particular emphasis on the role of men in decision making.

Regulatory approaches and methods show how the company should proceed manager to substantiate adopt and implement effective and efficient decisions. Within the normative approaches are delimited three main forms:

1. Presentation of decision approaches that have resulted in outstanding economic results. This is done in the form of case studies, which are actually models for managers faced with situations similar or identical decision.

2. Design and use of methods and techniques used either to streamline decision-making decision-making processes as a whole, either phases thereof. Numerous methods have been developed particularly effective, appealing widely in mathematics and computer science (decision tree, electrical, decision table etc.).

3. Development of complex concepts, uniform Treatment and structuring strategic decision-making processes, during which integrates methods, techniques and case studies decision: Igor Ansoff who, in one paper devoted to corporate strategy, formulated a comprehensive and analytical approach strategic decisions, considered the first normative conception of coherence, which heavily influenced future developments of theory and practice decision-making; Michael Porter, the two reference works, outlines a new approach aimed at obtaining decision by the firm competitive advantage, through the interface between the firm (micro) branch (macro) and international market (mondeconomic).

The main quality of normative theories assembly is to address questions of decision-making in a systemic vision, and effectively subordinated to the stated purpose of ensuring its rationalization.

Both approaches, and each with its limitations, they brought very important scientific elements to explain and improve decisionmaking. A show business practice where, increasingly more often, decisions are developed using scientific procedures, making wide use of computers with certain effects on the efficiency of decision.

C. Businesses and state - partners with common interests or divergent?

Matters relating interested in our approach, however, revealing how the manifestation of state involvement in the economy generate certain levels decisions regarding the management of private companies, more or less judicious.

Thus, we know that the basis of a decision occurs after a certain algorithm, building on certain signals coming from environmental interference internal-external environment company. If you were to chart the simplistic approach by analyzing SWOT diagnosis, we could say that any company wants highlighting the strengths, mitigate weaknesses, exploit opportunities and avoid the threats direction. Of course, the mechanism works great when the whole market moves by its own economic rules, with a low degree of involvement of public authorities. Moreover, are authorized voices supporting in particular the role of the mechanism self-regulating free market, contributing to the emergence of other state benefits at company level, the phenomenon known as the efficiency of x, which involves minimizing total operating costs of a company, at a given level of input prices.

Making a parenthesis, x efficiency is the efficiency with which a set of "inputs" are used to produce "outputs". If a company produces maximum output of which is capable, given the resources available, both as employees and as equipment (Best Available Technology), it is "x efficient". X-inefficiency occurs when the efficiency specified above is not satisfied. X-efficiency concept was introduced by Harvey Leibenstein American Economic Review in 1966. The theory of perfect competition, there will be x-inefficiency because if any firm is less efficient than the other will not make enough profit to remain on the market long-term. However, other shapes such as monopole market, it is possible to have x-inefficiency due to the lack of competition which makes it possible to use production techniques ineffective.

But, when the state intervenes in the economy in various forms are disturbances to the private sector, or rather, managers will take certain decisions that, in other circumstances, would not be adopted. We will analyze the following typology of companies that use public funds to finance

activities in different proportions, using our relational strategies, trying to identify factors in the environment that impact upon economic policy decision-making process at the micro level.

The literature management strategies are divided into: competitive, based on competition law and relational alliance or cooperation. Strategies Relational not based on competition law, but the special relationship that the company establishes with selected partners in its domain, in order to increase performance, taking birth as a result of environmental changes: a shrinking resource information explosion, the growing complexity of the external environment.

Thus, there are four categories of partners - state, one or more competitors, some customers or suppliers, all kinds of pressure groups - and four types of relationships - market, technological, financial and social. [92]

On these coordinates can build a matrix (Table 1) in falling six types of relational strategies: national protection, representations, agreements liberal clubs providers state, political and technological strategies and politico-union strategies.

Table 1

Relational strategies

Relationship types / Types of Partners	Market	Technological	Financial	Social
State	1.1	1.2	1.3	1.4
One or more competitors	2.1	2.2	2.3	2.4
Some customers or suppliers	3.1	3.2	3.3	3.4
Pressure groups	4.1	4.2	4.3	4.4

1. National Protection (area 1.1) - by US intervention, the state protects national companies on the domestic market to foreign competition. These measures may be direct (less common due to the integration of commercial arrangements that prohibit such practices at the level of the member states) and indirect (common) specific to an industry or a product.

2. Arrangements (area 2.1) - two companies conclude an agreement on their market strategies, deal that eliminates competition between them or regulate. He is kept secret if it is contrary to legislation or formalized and approved by the public power. 3. Agreements liberal (the 2.1 with 2.2, 2.3 and / or 2.4) - agreement between two competitors is extended outside of market relations in the technology. In this case, partners can develop a new product or manufacturing process, in conjunction with their joint operation. Agreements of this kind may also relate to financial and social relations.

4. Clubs suppliers state (zone consisting of 1.1, 1.2, 2.1 and 2.2) - State divided its orders to a small number of companies so that no price or performance are not elements of competition.

5. technological political strategies (area consisting of 1.1, 1.2, 2.1, 2.2, 3.1 and 3.2) - previous system expands, so that the state ensures full integration of upstream and downstream of the production cycle. Appropriate specialized companies benefiting from public funding for research and development, public orders and export subsidies, each suppression of all competition.

6. politico-union strategies (area consists of 1.1, 1.3, 4.2 and 4.4) - Enterprises seeking first agreement of unions and public power to maintain artificially alive, aided various limited period.

While arrangements and agreements are liberal-operation strategies, without state intervention, the other four - protection of national, state suppliers clubs, political and technological strategies and union political strategies - targeting businesses privileged relations with the state. The latter are meant to help the company to better face competition in order to increase performance.

However, Romanian reality has often demonstrated that enterprises privileged relations with the state does not take place under conditions of legality but also relates to private interests and a side.

Until the current crisis, at least as it showed us statistics, the construction sector experienced a true revival. In our approach, perhaps most interested in public investment in this sector, meaning

[92] Ciobanu, Ion, *Management strategic*, Editura Polirom, Iaşi, 1998

upgrades existing sites, repairs to buildings or new investment objectives supported by public expenditure.

The existing legal framework and especially the Emergency Ordinance no. 34 April 19, 2006, as amended, concerning the award of public procurement contracts, public works, was meant to ensure compliance with fundamental economic principles shipping market system:

- Promoting competition between operators;
- Guaranteeing equal treatment and non-discrimination of economic operators;
- Ensuring the transparency and integrity of the public procurement process;
- Ensure efficient use of public funds through the application procedures for the award by contracting authorities.

At least at this level we are dealing with a interventionism "meritorious". Public investment is a way of involving the state, which provides "feeding" operators, private businesses. And especially it was well known slogan - "pays more difficult, but certainly pays". As such, management decisions were targeted - artificial in our view - by obtaining contracts with the state or creating public-private partnerships.

Thus, they sacrificed the high margins of profit in certain cases, to obtain contracts, when it was established bidders criterion of lowest price, and later, after adjudication and principles uneconomic, it experienced a gain value of the contract, justified by additional work, hidden, appeared like magic. The state began again to lose, budgeting the contract and for certain goals, values which subsequently proved to be higher, requiring additional resource mobilization. These "slips" have been corrected to some extent by applying criteria related to technical aspects and price, with a different specific weight in the total financial and technical bids.

Of course, not infrequently, such contracts have migrated to the illicit, from the desire of businesses to award the tender by bribes or undue benefits to the insistence to obtain a term to be paying more advantageous, or before other executaseră entrepreneurs who already works in that public entity - a phenomenon that has led to a new artificiality of the business environment and making decisions based on assumptions signals or deformed, becoming more distant from the economic sphere. Maybe even this would not have been particularly serious corruption in any country there are different levels of socio-economic life. Tributary concept that the state will pay anyway, even if difficult, businesses and are now active in a larger proportion by contracting with the state, becoming addicted to it and giving up other activities or portfolio reviews. Perhaps best observed this today, during the crisis, when the stall begin to pay increasingly more difficult and less frequent amounts for entrepreneurs, approaching the latter from an acute lack of cash flow.

Also interesting are the causal mechanisms of making decisions that are articulated in the private sector by state intervention in various directions of economic life.

Thus, it is well known the role of taxation in terms of the state budget for procurement of resources, resources to finance various public expenditure, many of them major social impact. But what will happen when, at least through a high level of income tax, in conjunction with other taxes, taxation will become or becomes confiscatory, or where such plastic expressing an entrepreneur, the state, which already owns 16 % of a firm's private partner puts "impede" or, as an expression of French economist Michel Didier, "killing the golden goose"?

The answer to this question is intuitive, meaning that the private sector will distort some economic activities to the gray or even unlawful, trying in this way to preserve some of the gains. The consequences are negative for both partners: lower budget revenues, along with increased market turmoil, economic environmental contamination generated by Artificial private decisions of such a conjecture. Moreover, companies give harder to share the profit, trying to operate even collective redundancies to reduce costs. So behavior within managerial decision-making, as I said earlier is artificializează, ridding the economic side.

But remember, by virtue of the above, if measures to increase public spending through programs like thermal rehabilitation, infrastructure, to mitigate the effects of the economic crisis longer a plausible option, or just a pale variant of action, affecting more perverse? Could it be that these public contracts multiannual in road infrastructure, it actually amplifies this spiral?

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IMPORTANCE OF SMES IN THE ECONOMIC DEVELOPMENT OF ROMANIA

Silvia Elena ISACHI[93]

Abstract

Small and medium enterprises are situated of many years in the top European policy of sustainable development, is considered a key factor for growth, employment and economic competitiveness. SMEs have demonstrated resilience and flexibility in the face of new challenges posed by the crisis they contribute greatly to the economic recovery and restoring stability in the economic parameters. At the same time the SME sector is at an inflection point still under the impact of the severe decline in the years 2009-2010, the effects of which were later propagated by reducing consumption, unstable tax system and banking system became more reluctant in lending to companies small. The performance of SMEs in the EU depend on macroeconomic developments, it requires actions to improve the business environment in which SMEs operate, able to contribute to solid growth and sustainability.

Keywords: SMEs, taxation, employee, business environment

JEL classification: D01,H32

Introduction

The enterprise is the most important part of economy and society. The enterprise or the company - by which we understand an organisation made of one or more people who develop activities and who usually use economic means in order to obtain profit - is the most spread organisational form.

The small and medium enterprises represent the most numerous and important sector of enterprises, as they fulfil different economic, technical and social functions:

- they generate the greatest part of GDP (PIB) in each country, usually between 55%-95%;

- they offer places of employment for the majority of the occupied population;

- they generate, in a high proportion, the technical innovations applicable in economy;

- they present the highest dynamism on the terms of market economy, situation proved by the evolution of their number, the volume of the turnover and the size of the occupied work force, slightly superior to the big enterprises;

- they create products and services at expenses that are lower than those of big companies; the main factors that determine this difference are the lower constant conventional expenses; the superior volume and intensity of work under the conditions of a permanent presence of the entrepreneur in the company and, usually, a higher motivation of the staff;

- they show flexibility and high adaptability to the requests and changes of the market, favoured by the more reduced stature, the quick decission-making process, that characterizes the entrepreneur and his direct involvment in current activities;

- they represent one of the main sources of incomes of the state budget (taxes, VAT etc.);

- they offer the possibility of professional and social fulfilment to an important part of the population, especially to its most active and innovative segment, that "draws" economy after it;

- they ensure the main part of an economic background that is favourable for the market economy, characterized by flexibility, innovation and dynamism;

- they represent the seeds of the future big companies, especially in the new fields of economy, in its top branches based on technique and complex and performant technology;

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- the present tendencies of technical, economic and social nature favour the creation of small and medium enterprises in particular.

Small and medium enterprises present estimable structural "weaknesses" whose knowledge and counteract are essential. We hereby state which are these "weaknesses" characteristic to small and medium enterprises: the small weight of the incorporated resources and of the reduced reserves that they dispose of; the dependance, which is usually decisive, of its existence as only one person, the entrpreneur; the deficient taking into consideration of its specific interests and characteristics by the power factors from the environment; the technical level which is frequently lower compared to big companies; the stability and the permanence that are more volatile due to the previous specific features.

The sector of small and medium enterprises from Romania in an European context

The small and medium enterprises are situated in the center of the European policies of sustainable development, being considered one of the key-factors for the success of *Europe Strategy 2020*, through their contribution to the economic growth and creation of work places and also for the role that they have in the innovation and competitiveness of Europe.

Small and medium enterprises proved their capacity of adaptation and flexibility towards the new challenges generated by the crisis, contributing in a great extent to the economic recovery and the restoration of economic parameters in the stability area.

As a consequence, the European Committee emphasized the support of entrepreneurship and small enterprises, at the same time with relaunching the community policies supported through dedicated support tools and including small and medium enterprises in the strategies of industrialization, competitiveness and innovation for Europe.

Small and medium enterprises are by definition players of smaller span on the national and international markets, usually activating on the local market, strongly connected with the profile and the necessities of the economy from the land or region that launch its activity.

The characteristics of the local socio-economic environment influence the competitiveness of small and medium enterprises on the market, being determinant for selling products and services at high quality standards and they contribute to the diversification of the offer and the extension of local enterprises on new markets.

As small and medium enterprises face especially problems related to resources in order to be able to maintain themselves active or to be able to develop, facilitating the access to financing represents one of the major priorities of Europe, to achieve the increase and occupancy objectives, the European Committee elaborates tools and concrete plans of actions intended to ensure the financing necessary for companies.

In the field of financing, there are stated concrete measures, supported by significant budgetary allocations. The present economic realities require particular attention towards the needs of the small and medium enterprises, taking into account the deterioration of the investment climate. The European Committee considers necessary the introduction of new initiatives intended for improving the access of small and medium enterprises at financing, including through new capital markets and fiscal policies of stimulating investments.

The sector of small and medium enterprises from Romania presents itself as being one in expansion, with a more and more important role in the assembly of economy. So, it is estimated that under the present economic conditions and in prospect, the small and medium companies are the only ones that can generate work places and as a result, the economic development is directly linked to it. The evolution of this sector is illustrated by the following basic indicators: the number of enterprises, the number of employees, the added-value, the apparent productivity of work, the leaning towards investments, the index of the entrepreneurs' appreciation and the capacity of management to face the crisis.

Table 1

Distribution of SMEs, employment and value added size classes in 2008 and 2013

	SME class	2008	2013
No. of SMEs (percentage)	Micro	92.37%	92.51%
	Small	6.56%	6.44%
	Medium	1.07%	1.05%
No. of employees (percentage)	Micro	44.08%	43.38%
	Small	30.25%	30.85%
	Medium	25.67%	25.77%
Added value (percentage)	Micro	37.28%	37.10%
	Small	31.66%	31.32%
	Medium	31.06%	31.59%

Source: Statistical database for the annual report of European SMEs 2013-2014

The evolution of the number of small and medium active enterprises was a positive one until the year 2008 and after that, because of the effects of the economic crisis, their number began to decrease. The lower work productivity in Romania has negative effects on the competitiveness of small and medium enterprises. By combining two indicators, the percentage of the medium number of employees and the percentage of the added-value, we can determine the apparent productivity of work in small and medium enterprises compared to the medium level on economy.

The main difficulties that the small and medium enterprises have to face are: the decrease of internal request, excessive taxation, inflation, bureaucracy, corruption, excessive controls, high expenses of credits, delays at collecting the counter values of the bills from private companies, the difficult access at credits, employment, training and maintaining staff, growth of the level of payment expenses, weak quality of infrastructure, competition of products from import, not-paying bills by the institutions of state, decrease of request at export, obtaining the consultancy and training necessary for the company, knowledge and adoption of community acquis. Other difficulties identified by the small and medium enterprises are: unfair competition, very high expenses with the rents of commercial spaces, the economic crisis, the prices of raw materials, decrease of the population's standard of living that is reflected in the reduced number of customers, injustice made by the taxing institutions to the small companies compared to large organisations; weak training of the state's clerks etc.

The recovery of economic development both in Romania and in Europe depends on the evolution of the sector of small and medium enterprises because these represent the most dynamic factor in economic development and social insert, by its potential of competitiveness and innovation and by its capacity to create and maintain work places in the society.

Small and medium entrepises have been situated in the top of European policies for many years, being considered a key-factor for economic growth, occupacy and competitiveness. At the level of the EU, the compensation of the loss caused by the economic crisis that started in 2008 still remains a challenge for small and medium enterprises. The economic results recorded in the last few years indicate the signs of a recovery of small and medium enterprises. There are uncertain evolutions on the assembly of the small and medium enterprises sector, with clear differentiations between countries, sectors of activity and size classes.

Table 2

Evolution performance of SMEs in the EU28

Indicator	2008	2009	2010	2011	2012	2013	2014	2015
No. SMEs	21261849	20974190	21755376	21901107	21810243	21614919	21564839	21646395
No. employees	90806273	900332632	89933916	90077618	89297328	88843465	88981523	89585622
VAT (EUR mil)	3622465	3273275	3425857	3570666	3626206	3666778	3769518	3899312

Source: Statistical database for annual report 2013-2014

Generally, the statistics regarding the small and medium enterprises from Romania are situated under the European average and the profile of the country's performances is under the level of the EU, both because of the crisis and the significant decrease of GDP (PIB) from the national

economy and as an effect of general instability, factors that have influenced together the progress of the policies for the small and medium enterprises. However, present estimations show a come-back of the sector of small and medium enterprises close to the levels previous to the crisis in what regards the number of companies and of employees and less of the added-value.

The Romanian small and medium enterprises are less competitive, less innovative and have a weaker technological basis than their bigger correspondent. From the point of view of the competitiveness of the Romanian small and medium enterprises on the EU market, we can observe the disparty between the level of productivity and their efficiency.

The impact of the crisis could explain, until a certain point, the change of paradigm of perceptions and attitudes towards entrepreneurship manifested in the Romanian society in the last years. But the opportunity factors, such as the free access to the unique market, the cooperation networks and the EU resources and especially the important number of programmes and projects with the related financial allocations, addressed to the objective of promoting entrepreneurial culture and education, all these should have come as a counter-weight.

The situation of the Romanian small and medium enterprises shows more performancy deficiencies and competitiveness disparties that determine an insignificant role of these in the assembly of the sector of small and medium enterprises from the EU. However, in this context some positive features are highlighted in the structure on size classes and economic sectors that represent a valuable potential of competitiveness, that could be valued through effective policies and public interventions, in order to consolidate and develop fom a competitive point of view the small and medium enterprises from Romania.

As a consequence, the future actions should continue to focus on a mixture of complementary measures, aiming at the improvement of the business environment, the financing needs and facilitating the access of the small and medium enterprises to the proper tools, with a more powerful emphasis on the innovation of business and on the creation of the qualifications and professional competencies that are highly specialized. An effective mechanism of monitoring and evaluating the implemented measures and the new initiatives remains a desideratum for the business environment, that has to be put into practice by elaborating the necessary methodologies and by actively involving the representative organisations of small and medium enterprises.

The support for the improvement of the business environment by simplifying the procedures and by diminishing the administrative expenses must follow all the key-moments from entrepreneurship life cycle (startup, development, transfer of business, bankruptcy or second chance), through legislative and fiscal initiatives, having as an effect the reduction of bureaucracy and the number of taxes and duties, that is still well above the EU average.

Education and professional training are key factors for the acquisition of knowledge and necessary attitudes to succeed in business, but we do not have to neglect the deficit of qualified human resources in fields of specialized competencies that the Romanian companies have to face at present. So, the development of professional dual education and the intensification of the training curricula for the employees from the small and medium enterprises are compulsory requirements. One of the recommendations, in the context of present evolutions, is the creation of stronger bonds between research, innovation and industry, especially by offering priority to the activities that have the potential of attracting foreign investments.

At the same time, small and medium enterprises should adapt their own business strategies to the present exigencies of the global market in order to increase their competitiveness and to be able to benefit and to successfully value the opportunities offered by the new operational programs with financing from European funds. Strategic governmental measured and coordinated actions are required to support the enterprises that are economic active in the more and more powerful competition from the EU unique market, as well as to stimulate business and to create new companies.

On the other hand, the evaluation of performance indicators and of evolution tendencies of the companies that are active in the non-financial economony highlight the limited resources and the precarious technological basis, that is more striking in the productive sector, small and medium enterprises generally operating at the limit of subsistence and cirsumstantially orientating towards traditional fields.

At the same time, serious budgets should be allocated for dedicated financing programs and schemes, that would give financial support directly to the small and medium enterprises oriented towards innovation, creating the premises to build, in Romania, a critical mass of enterprises with a growing potential, in fields of high technology or based on the tranfer of the results from reasearch.

The future governmental policies should start from an evaluation as strict as possible of the impact on small and medium enterprises, on the one hand on the legislative and fiscal frame, introducing without any delay the European tool "*SMEs test"*, and on the other hand on the effect produced by the public financial interventions of any kind, by creating and using the appropriate mechanism of monitoring and evaluating.

It is also required the facilitation of some new ways of alternative financing for startups and for small and medium enterprises in general, including by giving penalties to the legislation where is necessary, as well as the need of simplifying the fiscal legislation in order to stimulate the more pronounced development of the alternative financial markets.

General aspects regarding the fiscality of the small and medium enterprises in Romania

Fiscality is unequally borne by the contributors that are legal persons. Even if the small and medium enterprises hold a smaller percentage from the national wealth, their contributions to the public budget (VAT, profit taxes, other taxes and duties) and to the compulsory social assurance funds (pensions, unempolyment, health, other contributions) are bigger than those of the companies with state capital.

The brute result of the exercise (the sum of all profits minus the sum of all losses) for the small and medium enterprises is higher than in big enterprises. Also, in what regards social budgets, the small and medium enterprises are still those that pay the biggest amounts of money, because they hire a significant percentage of employees at a national level.

Romania does not have, at the level of small and medium enterprises, the greatest time offered for payments. In exchange, it has an extremely high number of payment obligations, which shows a certain lack of interest of the authorities.

These could simplify the payment procedures and leave more space for enterprises to focus on their object of activity, even if the subsequent distribution of taxes charged for different destinations among the state organisms would be more laborious. On similar terms, it is not the level of profit tax that seems to be a problem, but the ad-hoc function allocated to the enterprises that collect taxes for the taxation of work force.

Moreover, just on the segment of taxing work force and of contributions, the fiscality from Romania gets to overtake not only the average in the region of East Europe and also that of the most developed economies worldwide, grouped in OECD. This in spite of its position which is clearly more favourable at the chapter "other taxes" than Western countries and those from the region.

So, in order to get close to the Western practice, we would need improvements of the business environment intended to diminish by half the percentage of the underground economy in GDP (PIB), of course with the proper effects on the institution of a loyal competition. The decrease of tax evasion can be made either through offering stimuli for voluntary compliance or through a well dosed combination of all these. Unfortunately, the first option has already shown that it generates side effects, affecting in a negative manner the economic agents of "good faith" too, with an infibition effect on the economic development.

The second option was less used, where measures that have already been taken in other countries have not been taken into account by our country yet. So, a comeback to the VAT share before the crisis by a quantification at the level of cash cards and reimbursment in accounts or compensation with the payment of tax on deposit interest would be a quite simple solution.

The support measures must be oriented towards all the categories of small and medium enterprises and they must aim at all the stages of the life cycle of business. A special attention should be given to financing for the first development stage of a company, following at the same time a more favourable taxing frame for financing in the initiation stage of the business.

It is also considered that it would be useful the initiation of the following measures:

- the support of the small and medium enterprises by reducing the expenses linked to respecting tax regulations by: adapting the system of tax administration; simplifying tax declarations; facilitating the paying of taxes and duties by using electronic means; accelerating the implementation of the unique digital market;

- the assurance of a tax coordination so as to eliminate the possibility of a double imposition ir of other taxing practices with negative effects that affect the unique market and the transboundary business or the investments of transboundary venture capital;

- the reduction of the expenses imposed by respecting the tax regulations, especially in the case of small companies and of those newly created that have great difficulties related to the abidance by the complex tax legislation and the difficult procedures of reporting;

- the re-evaluation of the tax on profit regime, taking into account the possibility of extending the status of loss limitation and of the deductions from the tax on profit.

Conclusions

The small and medium enterprises from Romania appear as a fragile segment in the assembly of the European small and medium enterprises, presenting some problems of competitiveness and development disparties compared to the medium performance from the EU, disparties that have been amplified in the period after the crisis.

There are some elements that customize the structure of the small and medium enterprises sector from Romania and these are the higher percentage of small and medium enterprises class (compared to the EU average) and the more intense activities in the processing industry. These show an unexploited potential of the small and medium Romanian enterprises, that could be the basis of a favourable evolution expected in the following period.

The economic results obtained by the small and medium enterprises from the EU in the last few years indicate the recovery of performances on the whole, but we cannot state that the tendency of positive evolution that they have is stable or irreversible. The small and medium enterprises from the EU present great discrepancies of development from one state to another, that take shape at the level of the big regions of the continent. The disparties gathered in the evolution history of each economy have been highlighted by the nefarious impact of the worldwide crisis and through the incapacity to answer of many of the small and medium enterprises.

As a constitutive part of the small and medium enterprises sector from the EU, the small and medium enterprises from Romania prove to be a segment that is still fragile under the following aspects: demographic inconsistency, reduced contribution to the economic and competitiveness performances and the deficient capacity to answer the crisis.

The changes of structure from the small and medium Romanian enterprises sector, beyond the disappearance of a great number of very small companies, could have the significance of consolidating and passing to a superior competitive level of small and medium enterprises on the whole, if in the next stage the accent is put on the improvement of productivity, which at present is lower than the EU average. The structure on economic sectors shows a feature of the assembly of small and medium enterprises from Romania: their significant presence in the processing industry, in a higher percentage than the European average. This is a relevant characteristic for their competitive potential in the context of the new community policies for relaunching the European industry. In addition, along the period after the crisis, there has been a growth of this percentage, Romania being one of the few European countries with significant achievements in what regards the overtaking of the values before the crisis at the indicators of the industrial production.

If in the European countries with strongly competitive economies in a traditional manner, the reduced density values of the small and medium enterprises does not influence the excellent level of competitiveness, for Romania the demographic dimension of business must remain a preoccupation and the startups must continue being stimulated, especially in the context of the decreases from the last years.

The negative effects manifested through the inhibition of entrepreneurial initiatives, can seriously affect, on a long-term, the population of small and medium companies from Romania, as well as

the growth, the places of employment, especially those for young people and last but not least the turning to advantage of the innovative and creative potential that the startups, by nature generate in any economy. The radiography overview of the companies from Romania show a series of inabilities and vulnerabilities of small and medium enterprises, that appear as being insufficiently prepared to successfully compete on the internal market of the EU.

The limitations of small and medium enterprises related both to general features and to the characteristics of each size class or field of activity were aggravated during the generalized crisis, the Romanian enterprises had to develop in an unfriendly economic environment, characterised by structural imbalances, instability of the tax system and by a banking system reticent at crediting small companies.

Especially depending on the internal consumption of the local market, the small and medium enterprises were affected by the decline of the national economy in the years of crisis whose effects propagated in the business environment by reducing the consumption at the level of population and averse evolutions of the main macroeconomic indicators.

The maintenance of financial stability in Romania in spite of the difficult internal and international conjuncture was made in the context of the measures taken by the National Bank of Romania regarding cautious regulation and surveillance of the risks from the system. But at the same time, the conditions of crediting were made harsher by the commercial banks, the majority of the credit institutions considering small and medium enterprises and especially very small companies as having a high degree of risk. The amplitude of the effects of the crisis and their prolongation on several years are translated through a decrease of the number of small and medium enterprises from Romania and the loss of the related places of employment starting with 2009. The complex of difficulties that appear could not be compensated by the European funds available for small and medium enterprises, as the using degree of these financings was reduced, both because of a defective administrative management and because of a lack of experience and knowledge of small entrepreneurs in implementing European projects at the rigours imposed by procedures.

The entrepreneurs' atractivity towards agriculture and energy can be explained taking into account the potential of internal resources and the local market outlet, as well as the governmental policies of consistent financial support, oriented to these fields. We can distinguish the enterprises with activity in agriculture that configure as a stable segment under all parameters, even if at unsatisfactory values compared to the existing potential, being the only group of companies with a constant positive evolution on a medium term. These tendencies lean on the integration of the small and medium enterprises from agriculture in the chain of suppliers for the food industry and on a relatively high internal consumption market. Among the regions of Romania, there still exist general development disparties gathered in time, that are reflected in the business environment and in the entrepreneurship level.

The public policies and the financial support tools for the small and medium companies from Romania attarct sources and mechanisms of various financing. Besides the direct financing for the development of small and medium companies, allocated from the state budget and from the Structural and Cohesion Funds, the mechanisms and funds of guarantee and counterguarantee, mainly capitalized by the Government of Romania, are the main levers that facilitate the access at financing small and medium enterprises.

The access at bank loans is restrictive for the majority of the small and medium enterprises, these being perceived with a high level of risk for banks. In the absence of collaterals and classic guarantees, the chances of small and medium enterprises to obtain bank loans diminished even more in the last years, marked by recession.

The microfinancing sector has rapidly evolved in the last years, becoming an important source for the small entrepreneurs from Romania. Microcredits are given under favourable conditions, by the financing institutions of microfinancing from Romania that succeeded in obtaining a good connection to the facilities and European programs available on this segment.

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AN ATTEMPT TO QUANTIFY THE ECONOMIC AND FINANCIAL LOSSES IN ECOSYSTEMS

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Abstract

Currently, the disturbances (mainly negatives), occurring in socio-economic systems, have fewer short-term solutions, and the medium-term and long term disregard greater sustainable development at the levels micro, meso and macro.

Economic and financial losses registered in such eco-systems, affected by disturbances in the stability and integrity of them, are leading, in most cases, to major climate changes, especially at regional level and local zones, with unexpected and diverse implications, sometimes irreversible over the enviromental environment. Quantifiable value such losses, both quantitative and qualitative, in a specific case (losses in Norway spruce, Picea abies, forests affected by biotic and abiotic factors of Bârgău Mountains) may provide new ways of approach.

This is the view in which we are interested in: the economic and financial losses may be quanitifiable in the effects of the disturbances cause, in a manner of the "rolling snowball", with larger damages (losses) in the adjacent zones, or in the downstream from Bârgau Mountains (situation that can be generalized).

Keywords: economic losses, eco-systems, disturbance, climate changes, "rolling snowball", cause, effects.

Jel cod: Q01, P51, Q15

1. Introduction

1.1. General Consideration

Currently, the issue of disturbances (mainly negative) that occur in socio-economic systems has fewer short-term solutions, and the medium-term and long disregard greater of sustainable development at the macro, meso and microeconomic.

Otherwise the entire universe, from the atom to the galaxies, is structured a unique model systemically. L.von Bertalanffy (1956) defines as a complex system “the items that are in constant interaction with each other” (Milescu, I., 1994, page 13). All forms of matter making up a multitude of systems.

The systems consist of a combination of elements that are in permanent interaction forming a whole whose properties are superior or others in terms of quality than the sum of the constituents, which are defined as subsystems.

Each system has its environment in the universe and hence L.von Bertalanffy, given the definition of Hall and Fagen (1956) “that the system is a set of objects with relationships between them and their attributes”, classifies embedded systems (a change in a component of the system lead to changes in all other constituents and the system as a whole) and summative systems, the change of a component of the system depends only on that component. We arrive in this regard, a continuous exchange of information within the system environment to a hierarchy of systems, the interaction by sharing their information and their embedding.

Another grading system would be, their interaction with the environment: isolated systems (without exchange of matter and energy with the environment), possible only in theory because they do not exist in nature, closed systems, they only exchange energy with the environment and systems open both the dead and the living in nature (ecosystems).

Economic systems in their attempt to reach the maximum of organization and technology, thanks to the laws of entropy, get to interact with biological systems with complex ecological structure and change them sometimes irreversible.

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The law of conservation of energy states that the total energy of an isolated physical system remains unchanged over time, regardless of the nature of internal processes occurring in the system. In other words, the various forms of energy of a system can turn each other, but the sum of the quantities of all forms of energy remains constant, it can not be created or destroyed. According to the concepts of modern physics, any amount of energy whilst expressing a table and each corresponds to energy of any mass.

Open biological systems have as main features: capacity, integrity, heterogeneity, self-regulation and dynamic balance.

Ecology has developed new meanings conceptually, can be defined as the science of ecosystem productivity biological synthesis of the elements and the extent to which factors abiotic and biotic actively participate in the process of permanent change in the original state, being in -a continuous dynamic.

The ecosystem is by definition “unity of the living community (biocoenosis) living in a given territory and the territory, defined in terms of homogeneity topographic, climatic and administrative criteria, biotope” (Al Ionescu, Săhleanu V and C bindiu ., 1989, page 73).

Forest “in a system for producing one ton of wood, the trees consume carbon dioxide, 1.8 tons and tons of oxygen eliberează1,3” (Milescu I 1997, p. 116).

As human society has evolved, developed, and social and economic systems, which culminated with technological massive, registering the countless errors sometimes true ecological disaster for humanity (desertification, species extinction through hunting irrational, flooding of areas, land degradation and the formation of torrents and areas of soil erosion, and chemical processing industry increased devoltarea agriculture, massive deforestation of forests for timber or for extending valuable farmland, grazing unreasonable, fires, invasion of insects, etc.

Important to note in economic systems theory it is that “maintaining the stationary state economic systems (more generally of the social) environment accelerates entropy increase” (Dinga, E., page 62).

Losses economic and financial made in such ecosystems affected by disturbances in the stability and integrity of their lead in most cases to major climate changes, particularly at regional and local level, with implications for various, sometimes irreversible environmental . Value quantified these losses, both quantitative and qualitative, on a specific case (losses in spruce stands affected by biotic and abiotic factors in Bargaului) may provide new ways of tackling the problem.

The link between hydrological and anti-erosion role of forests ,, based on research on the causes and effects of catastrophic floods, concluding that stands between composition and consistency and intensity of floods there is a clear correlation, specific maximum flow having the lowest values in basin and basins predominantly resins (1,35m3 / s / km2) and highest values in the basins in which resins and leaved entered in the composition stands roughly equal proportions (1.95 m3 / s / km2) "(Vlad I , Doniţă N, et al, 1997, page 267268).

Forestry systems have an important hydrological role, because the canopy can retain young molidişurilor lack of rainfall in the wind about 810G / m2 (Milescu I, 1997, page 114).

Disturbances that occur are a direct consequence “artificializării forests” (Giurgiu V 1978, page 265).

This is the view we are interested in: economic and financial losses that can be quantified, in effect determining the cause disturbances “rolled the snowball effect”, with greater damage (losses) in areas adjacent or downstream of Mountains Bârgăului (which could be generalized).

2. Research purposes

The project purpose is to identify optimal solutions in terms of trying to quantify the losses economic and financial ecosystems, referring Main detail on stands (forest ecosystems predominantly spruce Mountains Bârgăului) affected by disturbance abiotic and biotic, which causes major damage economic-financial and environmental and even social in adjacent and downstream, to shape these regularities and find possible correlations between certain types of structures and economic loss suffered in these ecosystems, to develop future the ecological

management of forest ecosystems, for FMUs in the area, according to the program sustainable management of natural resources and ecosystems adapt to climate change.

3. State of Knowledge

For judicious management of forest ecosystems of conifers, especially spruce, affected by disturbance abiotic and biotic, were achieved over time, a series of research, both globally and nationally, resulting through a series of articles showing quantification quantitative and qualitative economic and financial losses in the mountainous area of natural stands of conifers, published in specialized journals.

Less was trying to quantify the value of these disturbances because they are hard quantifiable value, especially side effects occurring such ecosystems in their production area and adjacent areas occurrence of such phenomena.

Although "species of conifers presents a health condition better and more stable than hardwood, climate having a significant deficit fluid and excess heat is more common in regions where languages are species of deciduous" (Badea Ov., Neagu Del., 2007), they are more vulnerable to the action of destabilizing factors (particularly doborâturile produced by wind and snow) due to climatic conditions tighter and pulled rooting system more unstable. This imbalance occurs mainly spruce forest ecosystems as a result of works for one does not cover the care (cleaning and thinning), leading to the creation of a coefficient of slenderness stands above par, with full consistency. Injuries caused by tree trunks big game: stag (Cervus elaphus) and bear (Ursus arctos), are ways in spores of fungi that cause rot red resin, resulting in a decrease of wood.

Also, attacks Ipidae major causes disturbances in forest ecosystems, biotic and abiotic factors exposed as it appears on stands debility with fragile ecological balance.

These disturbances occur mainly in stands of conifers, particularly spruce around the age of 60 years and who have not previously been taken care works specific time.

The wood is of poor quality and low quantity harvested trees being done before the age exploitability established by forest planning that the Polity how forest management in the area.

Thus, if "the timber offered for sale comes from packaged accidental, then the slope demand increases because the residual value of each meter bought decreases more than in the case of an offer normal because operating costs per unit of product are higher" (Dragoi M, 2000, p 39).

The phenomena of increasing soil erosion by reducing the anti-erosion and hydrological role coniferous forest ecosystems affected by disruptive factors leading to losses adjacent very difficult to estimate and quantify value. For such stands must be given concrete technical solutions and suitable brush concerned by destabilizing factors involved.

4. Research Objectives

In order to address the proposed theme were revealed following research:

- Negative interference problems arising in economic and social systems, with short and long-term solutions which do not take account largely sustainable development at the macro, meso and micro;

- Treatment of forest ecosystems in economic and financial terms as dissipative systems where entropy plays a fundamental role in organizing systems. We have the following paradox: the better organize economic and social system, the more disorganized biological systems (ecosystems);

- Economic losses recorded in such ecosystems affected by disturbances in the stability and integrity of their lead in most cases to major climate changes, especially at local and regional level, with implications for various direct local and areas surrounding sometimes irreversible environmental, so- called ,, efect.al snowball rolled ".

An attempt cuatificarea value of these losses quantitative and qualitative, was made specifically for the four stands with the same conditions stationary (habitat) and the conditions of vegetation (biocoenosis) affected by biotic and abiotic Mountains Bârgăului, the predominant spruce.

5. Description of the methodology used

In producing this study in order to achieve the objectives set by theme, they were adopted following research methods:

• observation; It necessarily implies the purpose of knowledge, planning, development long after the well-established rules and verified.
• experiment; This was tried by biometric measurements, the main elements the meter (especially diameters and heights) to indicate that, in certain circumstances, if a certain phenomenon happens regularly, it can be generalized and is a regularity well defined. It will come from a number of well-defined experiments to extrapolate the results for the entire area. To achieve this goal, it is necessary that prediction is testable.
•synthesis; Analysis determines the structure of forest ecosystems, the research scientifically well, silvicultural measures and decisions to be taken in the evaluation study, based on a shift from private to general, to reach generalization.

The methodology adopted has the advantage of low cost and effort performs in a relatively short time, obtaining very good results.

Research has assumed perform the following works:

- Analysis of trees affected by disturbance involving predominant spruce species described by consulting lots of forest planning area of forest districts Bârgăului Mountains and field observations:
- By choosing specific investigation four arboreta (ecosystems) representative theme addressed and Enumeration affected by disturbance on diameter classes and graded;
- Measurement of heights (10-15) for each species component of inventoried trees with diameters close to the diameter of the central base area for the species concerned, resulting from processing of Enumeration affected;
- Data processing computer program for calculating the APV site for finding and quantifying value volume assortments volume matching;
- Carrying out simulations statistical and biometric by calculating increases periodic table layout production, to highlight the final loss of timber, recorded during 10 years to date and losses economic and financial commercially available inhibitors of exploitation products accidental these stands that virtually no regular cumulated average growth since their extraction, the difference in years between the age stand in the draw and the current age;
- By taking the difference between the amount estimated at the date of operation for each species component of the stand, in part, by class production, consistency (index density of the stand), the percentage of species in the structure of brushes, area farmed in based on the production table (Giurgiu V., I. Decei, Armăşescu S., 1972, pages 630-640 and page 661) and the age of the reference volume, the current increase is achieved periodically over a period of 10 years in the case of front;
- Increase the current share periodic obtained for each species the period (10 years) and get regular average growth;
- Is the difference between the estimated volume in the current age depending on the characteristics listed in conditions where it is considered that it would not have been executed works accidental products during the period (10 years) and wood volume remained stand for each species at the time inventaririi whole (final cut) to give the amount of timber extracted by accidental product works for that period;
In this case, not all the wood extracted in the period represent losses increase because it harnessed and quantify value in the period, but the loss of growth are quantified by multiplying the number of years since extraction products incidental to the current age (a harvesting of wood), with periodic calculated average increase for that species;
- Sets the amount of the loss is quantified value representing the estimated losses increase, multiplied by the average cost price of a cubic meter of wood species inventoried;
Besides the loss of timber, there is a series of extra costs for forest regeneration in such stands, the ecological environment of the forest is also afectat.De hydrological role of forest ecosystems in flood prevention, more obvious lately is particularly eloquent. A forest decomposed and can not accomplish the optimum role in hydrological and anti-erosion.
- Making interpretation of results and final conclusions are drawn.

Analysis entropy of these ecosystems, in line with socio-economic systems, economic and financial, which are dissipative systems, has a negative effect on ecosystems, including forests, because trying to organize better nature after precepts economic and financial lead the final major disturbance in biological systems. Here's how "better", expected in neglecting ecological perspective can be ,, enemy of the good "(.Ionescu, Al., Săhleanu V., and bindiu, C. 1989, page 159).

6. Research Location and Description of Data Sources

The research was conducted in four ecosystems (stands) with the same stationary conditions (biotope) and the same vegetation (biota), deconstructed, elected representative, the predominant spruce trees in the forest reservation Tihuţa-Colibiţa R.A. administering a large part of private forests in the mountains Bârgăului. Of these, three are aged 60 years (stands young), and one of them for comparison is 120 years old (mature and exploitable) and allocated quantity of biotic and abiotic factors, especially doborâturi produced by wind and snow and wounds Product big game by a decrease of wood (bears, deer).

Photo 1. Forestry system which is affected by destabilizing factors (u.a.75c)

Photo 2. Degraded Ecosystem (u.a.662B)

The following table will show the landscape planner units (sub plots) in which the research took place, with their main characteristics and stationary biometric according arrangement production unit II Iliuţa, within O.S Tihuţa-Colibiţa.

Table 1

Experimental areas located in stands Bârgăului Representative Mountains, the predominant spruce species affected by disturbance

Crt. No.	Forest district	Production unit (u.p.)	Landscape planners unit (u.a.)	Area u.a (ha)	Inventoried area (ha)	Current Age (years)	Class production	Type of station	Forest Type	Proposed treatment
1	O.S Tihuţa-Colibiţa R.A	II Iliuţa	75 C	3,00	3,00	60	2	3333*	1311**	Progressive cuts (connection)
2		II Iliuţa	75D	2,38	2,38	60	2	3333	1311	Rare cuts
3		II Iliuţa	363 D	2,09	1,00	120	1	3333	1311	Progressive cuts (connection)
4		II Iliuţa	662 B	13,59	1,40	60	1	3333	1311	Progressive cuts (connection))

* Mixing mountain type Ps (higher productivity), brown high edafic, with *Asperula-Dentaria*

** Mixed coniferous and beech normal flora mull (s)

In these stands were made full inventory (“markers"), and stands framed in terms of forestry regulations in force on the first emergency regeneration. The result of inventory full of stands to be exploited materializes through to strip books of land diameter classes and graded and heights representative for trees with a diameter close dg (average diameter central base area) for each species component of stand, calculating VPA's (document technical and economical which calculates volume by species and varieties of materialuiui wood after inventories), prices are fixed for each species and assortment in part and is the basic tendering of wood by operators of logging operations.
Because I address an audience purely economic and not necessarily that of the forest economy have discouraged some technical terms explained.
Calculation “diameter central base area (DGM) is a median calculated on the base area” (Giurgiu V, 1979, page 174)

$$dgM = dM + C\frac{\left(\frac{G}{2} - SM\right)}{gn} \quad , \tag{1}$$

where:
dgM - is the diameter of the central base area;
dM - the lower limit of the diameter category is G/2;
C – class size diameters (2 cm);
G- the total base area;
SM - cumulated up to the base surface diameter range of the class in which the G/2 ;
gn - the bottom surface of the class in which the diameter G/2.

The average height corrected (hgMc) is calculated with the following formula (Giurgiu V,1979, page 195):

$$hgMc = \left(1{,}36 - 0{,}36\frac{d}{dgM}\right)h \quad , \tag{2}$$

where*:*
d is the arithmetic average diameter of trees inventoried species;
h - the average height of trees inventoried species.
After calculating dgM diameters close to trees as worth it, measure 10 to 15 trees for each tree species inventoried. If spruce species were measured every 15 trees for each surface experimental basis, and for other species by 10 trees per species.

The base area of the stand is obtained by summing multiple of the base diameter classes (ni,gi):

$$G = n1\frac{\pi}{4}di^2 + n2\frac{\pi}{4} + \cdots +, nk\frac{\pi}{4}dk^2 = \Sigma di^2 ni = \Sigma nigi \tag{3}$$

The average tree volume calculation is obtained by the equation proposed by Giurgiu and implemented in the computer program APV, based on the relationship:

$$\log v = bo + b1logd + b2log^2\ d + b3logh + b4log^2\ h4 \tag{4}$$

and the equation coefficients were determined by least squares for each species.

For determining the volume of the wood work and breakdown by primary and dimensional types, sorting tables apply for stands at the main forest species inventoried.

Applying these tables requires knowledge of the following data: the total volume of the stand, the average diameter of the base area (dg) and the proportion of working trees (first class quality).

Establish the number of working trees being recognized trees in grades II, III and IV is made by multiplying the number of trees in quality classes corresponding equivalence factors corresponding to these classes:

- resinous:

$$N = NI + 0{,}94NII + 0{,}81NII + 0{,}17\ NIV \tag{5}$$

- hardwood:

$$N = NI + 0{,}81NII + 0{,}57\ NII + 0{,}17NIV \tag{6}$$

where:
NI -NIV the number of trees in classes I-IV after inventory.

Estimate quality tree "is achieved by a careful visual analysis, monitoring the shape of the trunk and damages that may result in downgrading wood working or downgrading trees of a quality class to another, because of the size and position on the trunk portion defective "(Decei, 1986 citation Joseph Leahu 1994, page 269).

Next, apply sorting tables for average diameter stands by applying formula:

$$Vs = Vpi\ P \tag{7}$$

where:

Vs - the volume assortment;
V – total volume;
Pi - sorting index expressed as a percentage, for assortment i
P - Percentage of working trees.
For crotch volume, formula is simplified, being:

$$Vc = V\ pPcr \tag{8}$$

Firewood volume (Vf) will result subtracting the total volume (V) wood working volume (V1), plus the amount of peel (VCO) and CRAC (VCR), so:

$$Vf = V-(V1+Vco+Vcr) \tag{9}$$

Also, before sortimentare should be considered if windfall application downgrade and loss indices representing 2% and 1% of total volume.

Because, if stands taken in the studio, ruptures due to the wind and snow are dispersed among trees and there are tears in mass in the calculation of APV sites were considered and clues for downgrading the wood work and loss volume indices trees broken by wind and snow inventoried.

The correct application of these indices, it is necessary with Enumeration to register data on the height where the rupture occurred. In this regard it was calculated an average height of the rupture as an average of the high places diameter classes. Imposed following phases of work:

- enumeration and quality classification. Broken trees will move call "broken", and rupture height;

- measuring heights (2-3) shaft diameters from each category for both whole trees, and those broken;

- calculation of total volume and kinds.

The following table shows hints of wood working downgrade and loss volume indices trees broken by wind and snow (“Technical regulations designed to assess timber exploitation”, 1986, pages 53,80,82).

Table 2

Indices of wood working downgrade and loss volume indices trees broken by wind and snow

Specifications		The height from the ground of rupture (m)							
		base	1	1-2	2-3	3-5	5-8	8-11	14-20
		Percentage of total I(%)							
Crt. No.	Indices downgrade	7,5	8,5	12,0	10,3	8,4	5,8	4,9	3,6
	Loss ratios	3,6	5,8	6,0	6,2	4,7	3,8	3,1	2,7

7. Intermediate Rezults

Managing the huge natural resources of forest ecosystems, their management scientifically us through extensive research on mathematical modeling of legalities biological functioning, tracking state dynamics stands in their interaction with abiotic factors and biotic as well as anthropogenic

factors that may positively or negatively influence forest ecosystems, is a topical issue both nationally and in Europe and worldwide.

Management and accurate assessment of forest resources while reducing ongoing and alarming surfaces covered with forests, involves harmonizing the operation and exploiting produced wood ecological requirements of forest ecosystems without disturbing too much the biological activity thereof, which funcţiomează on dynamic equilibrium principle of self-preservation, ensuring the integrity and continuity for future generations in accordance with the principle of sustainable management of forests.

Table 3

The basic data for calculation of the volume of wood surfaces experimental

Crt. No.	u.a.no.	Species	Diameter (cm)		Height (m)		Age (ani)	The average tree volume (m^3)	Number of trees	Grow	APV no.
			dt	dcg	ht	hc					
1	662B	Spruce	30,3	30,2	28,5	28,5	60	0,800	225	0	4161
2	75C	Spruce	34,8	31,2	26,3	25,4	60	0,590	656	0	3765
		Fir	40,8	38,9	24,8	24,4	65	0,860	102	0	
		Beech	40,0	41,8	23,0	23,4	65	0,450	138	0	
		Sycamore	20,0	19,3	15,6	15,4	60	0,120	43	0	
		elm	19,0	17,7	16,3	15,9	60	0,170	6	0	
3	75D	Spruce	32,8	32,1	26,1	25,9	60	0,720	339	6	3764
		Fir	34,0	33,3	23,5	23,3	60	0,700	27	1	
		Beech	19,0	17,6	7,8	7,5	60	0,040	23	0	
		Sycamore	18,0	16,1	15,0	14,5	60	0,11O	9	0	
4	363D	Spruce	43,5	43,3	30,6	30,5	120	1,370	57	0	4177
		Fir	48,3	48,2	30,7	30,6	120	2,000	31	0	
		Beech	50,8	50,4	29,8	29,7	120	2,290	34	0	

The first three stands of units landscape planners: 662B, 75C, 75D are falling urgency 11 regeneration and includes vegetation aged over 20 years very heavily damaged by biotic and abiotic negative (fire, wind, snow, venison, rezinaj, etc.) assigned to the highest degree of damage. The stand of u 363D is a stand past the age exploitability technical being included in the urgency of regeneration 21, comprising stands exploitable and past the age of exploitability, attacked by disruptive factors mentioned above, assigned to high levels of injury (usually Levels II and III).

Reducing consistency (density) stand is mainly due doborâturilor produced by wind and snow in 2011 (spread evenly over the entire surface), in stands of units landscape planners: 662B and 75C, where they proposed that ecological reconstruction work through recovery application of progressive cutting attachment, followed by reforestation and care spruce seedlings installed.

The trees in the landscape planner unit 75D was proposed works to be performed, the treatment of clear cutting, followed by reforestation with appropriate species biotope due to lack seedlings installed, as well as its strong Cervidae injury. Spruce specimens assigned mostly class IV quality of shows flaking bark and rot at the base, due to injuries to their big game (deer and bear).

U 363D of the forest ecosystem is a last stand to technical exploitability age, the products have been reported doborături wind and snow mass, clustered on a portion of the 13.59 hectares 1.4 hectares (ha) has subplot (ua) întreagă.Tratamentul stand proposed in this connection is progressive cutting, followed by reforestation work and care of seedlings installed, the current composition as follows: 6FA 2MO 2BR. Succession is a tendency to spruce species at the expense of phage.

Through data processing calculation program APV was obtained volume of wood per surface experimentalul (match) and the results are quantified in the following table.

Table 4

Wood volume in experimental areas (Lots) assortments dimensional and primary

Crt. No	u.a.no.	Species	Volume dimensional sort (m^3)						Volume primary sorting (m^3)						Value (lei)
			G1	G2	G3	M1	M2	M3	Thin wood	Wood working	Bark	Fire wood		Lumber	
												Total	From crotch		
1	662 B	Spruce	5	74	33	29	8	0	3	152	17	10	7	179	28489
Total			5	74	33	29	8	0	3	152	17	10	7	179	28489
2	75C	Spruce	29	147	61	59	21	0	10	327	36	26	16	389	66740
		Fir	29	26	8	7	3	0	1	74	8	6	5	88	18274
		Beech	5	5	0	2	2	2	1	17	1	44	4	62	4193
		Sycamore	0	0	0	0	1	1	1	3	0	2	1	5	315
		elm	0		0	0	0	0	1	0	0	0	0	1	33
Total			63	178	69	68	27	3	14	422	45	78	26	545	89555
3	75D	Spruce	25	96	37	34	11	0	4	207	23	15	10	245	43642
		Fir	1	8	3	2	1	0	0	15	2	2	1	19	3155
		Beech	0	0	0	0	0	0	0	0	0	1	0	1	30
		Sycamore	0	0	0	0	0	0	0	0	0	1	0	1	18
Total			26	104	40	36	12	0	4	222	25	19	11	266	46845
4	363D	Spruce	29	22	6	5	2	0	0	64	6	8	3	78	13635
		Fir	35	12	3	2	0	0	0	52	5	5	4	62	12327
		Beech	9	7	0	1	0	0	0	17	1	60	4	78	4968
Total			73	41	9	8	2	0	0	133	12	73	11	218	30930

Knowing the algorithm then were processed data through the calculation APV and outcome data processing - document enhancement for all four surfaces experimental (Lots) in the study will highlight the following table input data to calculate volume each sort.

Altitude, landscape planners are situated between an altitude of 850 meters to 1050 meters 662B, 363D u.a upper limit of altitude.

Afforestation will be done preferably locally sourced saplings in forest nurseries in the area and in compliance with current regulations concerning the election compositions regeneration and planting schemes.

Economic losses are judged in relation to the reference state, ie the age of reference, where the predominant species, spruce, the natural range is technical operability and at the exploitability absolută.Nici outside the natural area is one of the two not exploitability economically justified.

The economic and financial logic, any income that occurs faster than originally planned is welcome, because the present value is higher. If you do not take into account the discount rate losses are only going to increase and they apply an average price of wood.

To stress losses economic and financial over a period of planning (10 years) were taken into account the volume of trees by species, production classes, consistency, at the age of 50 years stands in u.a. 662 B, 75C and 75D, and for u.a. 363D reference age was 110 years.

In these stands was taken from the tables of production volume by species and production classes at the age Current (60 years for the three surfaces experimental remembered and 120 years for surface experimental u 363D) of paper "Biometrics trees and stands in Romania "(1972) and considering that consistency stands remained the original, apart from accidental cutting of products made in the 10 years (which have significantly reduced the consistency to 0.2, 0.3, which has made the stands studied to be classified in one of urgency regeneration). The difference between the amount that would have to exist at the present time (the last cutting) and theoretically estimated initial volume existing 10 years ago, was established periodic current increase in volume. Regular dividing the current increase in the number of years in the period (10 years) gives regular average increase in volume per year. By dividing the periodic average, increase in volume resulting from the stand area average annual growth in volume.

Calculations for the loss of value due to losses increase was made for each surface experimental basis.

U.a. 662B to match the calculations were conducted in the following manner:

- Production of the tables to spruce stand aged 60 years, first-class production, full consistency (1.0) per hectare main production volume is 772 m^3 and 50 years, the production volume principal under the same conditions would have to be 671 m^3. ;

- The current composition of the stand is 10MB, consistency current stand is 0.2, and 10 years ago consistency in value was 0.8, lots of Arrangement as described above;

- Injuries are concentrated on an area of 1.4 hectares of the unit is 13.59 as landscape planners.

The volume of wood at the age of 50 years shall be calculated with the following formula:

$$Vsp = VtxPxkxSpr \qquad (10)$$

where:

Vsp - is the volume per species that age, participating in stand composition;
P - the proportion of participation in species in stand composition;
K - consistency (stand density);
Spr - stand area.

Applying the formula for this case:

$$V_{initialSpo50} = 6710 * 1,0 * 0,8 * 1,4 = 751,52\ m^3$$

(For ease of calculation volumes will use rounded values).
So, V_{Spo50} =752m^3 and represent total volume spruce stand (initially) the stand at the age of 50 years.

$$V_{estimate\ Spo60} = 772 * 1,0 * 0,8 * 1,4 m^3,\ V_{Spo60} = 865\ m^3$$

Estimated volume hypothetical while maintaining consistency of adding 0.8 and periodic increases the age of 60 years studied spruce stand (Vestimate Spo60) is the amount that would be obtained without interfering disturbance (caused by wind and falls snow and injury to the big game, insect attacks etc.).

Periodic current increase in volume (C_{CP}) is obtained by the difference between the volume of spruce stand at the age of 60 years, ie the volume of spruce stand at the age of 50 years as follows:

$$C_{CP}=V_{Spo60}-V_{Spo50}, \quad (11)$$

$$C_{CPSpo} = 865\text{-}752 = 113 \text{ m}^3$$

By dividing the periodic current to increase in volume at the number of years of time (10 years), to give the average growth regular (Cmp) one year following formula:

$$\mathbf{Cmp} = \frac{\mathbf{CCP}}{N} \quad (12)$$

where:
N - represents the number of years of time.

For this case, Cmp Spo = 113/10 = 11,3m^3 / year.

Distinguishing between volume stand of spruce estimated $V_{estimat\ Spo60}$ (865 m^3) and the existing form of exploitation $V_{existingSpo60}$ the stand (179 m^3 APV's) after extraction volume from accidental cuts (cuts unplanned arrangement, which occur due to the interaction of the stand with destabilizing factors) gives a theoretical volume extracted (V_{extras}) during the 10 years of 686 m^3.

Because of cuts accidental products were produced in 2010, 4 years ago drawing this APV (document enhancement), the trees lose just regular average growth in 4 years (11.3 m^3 / year * 4 years = 45 m^3. the comparison with the game, the losses in volume per hectare is 45 m^3 / 1.4ha = 32.14 m^3 / ha-1 (m^3 / year / ha)

The difference between theoretical extracted volume (V_{extras}) of stand by accidental cuts and C_{mp} 4 years, represents the actual volume of goods valued from accidental cuts in 2010.

Knowing the total amount in dollars, the volume of raw wood landscape planners unit (u.a.) 662B and volume harvested under the VPA's show the following values:

28489 lei /179 m^3 =159,156 lei/m^3 de lemn.

By multiplying the average price of a cubic meter of spruce with losses growing spruce stand during the accidental removal products until the inventory APV's stand and drawing, resulting in a loss of value:

45 m^3x 159,156 lei/ m^3 de lemn= 7162,02 lei.

Reporting the loss of value in surface area in hectares of experimental results 5115,73 lei/ha a loss of value.

Figure 1 graphically represents -financiare economic losses due to disturbances in u.a. 662 B

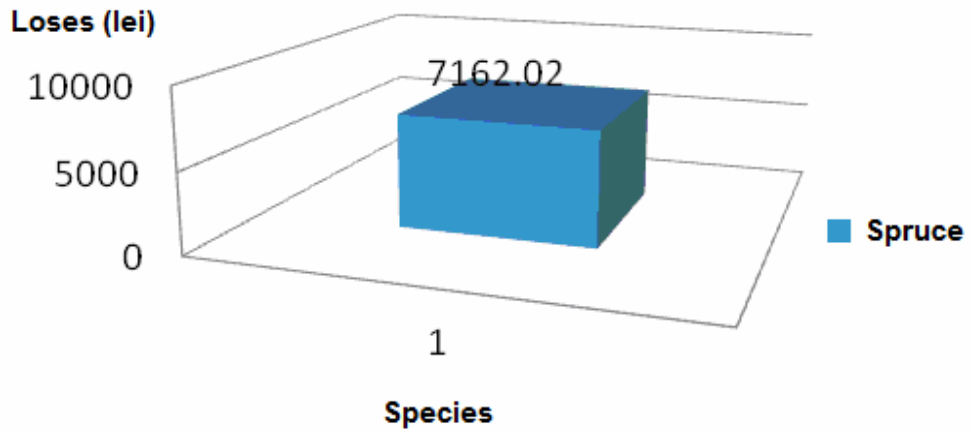

Fig.1. *Quantifying the loss of value growth spruce species in u.a. 662B*

In the experimental area U.a. 75C, the trees have the following characteristics:

- stage age is 60;

- stand 3.0 ha area;

- class II production is for all species of brush components;

- the current composition of the stand is 8 spruce, 1 fir, 1 beech

- consistency of the current 0,3, and 0.8 have a value of 10 years ago;

- injuries to biotic and abiotic factors are dispersed all over u.a.

By going through the same algorithm experimental economic area (match) of 75 C u.a. get:

- by applying the formula (10) to spruce species resulting values:

$V_{initialSpo50} = 536 * 0,8 * 0,8 * 3,0 = 1029\ m^3$

$V_{estimatSpo60} = 627 * 0,8 * 0,8 * 3,0 = 1204\ m^3$

- for fir species have values:

$V_{initialFir50} = 430 * 0,1 * 0,8 * 3,0 = 103\ m^3$

$V_{estimatFir60} = 532 * 0,1 * 0,8 * 3,0\ m = 128\ m^3$

- for beech species have values:

$V_{initialBeech50} = 335 * 0,1 * 0,8 * 3,0 = 80\ m^3$

$V_{estimatBeech60} = 401 * 0,1 * 0,8 * 3,0\ m = 96\ m^3$

By applying the formula (11) is obtained:

$C_{CPSpo} = 1204-1029 = 175 m^3$

$C_{CPFir} = 128-103 = 25 m^3$

$C_{CPBeech} = 96-80 = 16 m^3$

By applying the formula(12) for each species component of u.a 75C is obtained:

$C_{mpSpo} = 175/10 = 17,5 m^3/an$

$C_{mpFir} = 25/10 = 2,5 m^3/an$

$C_{mpBeech} = 16/10 = 1,6 m^3/an$

The difference between the volume of species spruce estimated $V_{estimatSpo60}$ (1204 m^3) and the existing form of exploitation $V_{existentSpo60}$ the stand (389 m^3 APV's) after subtracting the volume of cuts accidental, results in a theoretical volume extracted (V extracted) in the 10 years 815 m^3.

For tree species $V_{estimatFir60}$ (128 m^3) and the existing form of exploitation $V_{existentFir60}$ the stand (88 m^3 APV's) after extraction volume from accidental cuts, resulting a theoretical volume extracted (V_{extras}) during the 10 years of 40 m^3.

If the species beech $V_{estimatBeech60}$ (96 m^3) and the existing form of exploitation $V_{existentBeech60}$ the stand (68 m^3 APV's) after extraction volume of cuts accidental, results in a theoretical volume extracted (V_{extras}) during the 10 years of 28 m^3.

The difference between the volume extracted in theory ($V_{extracted}$) of stand by accidental cuts and C_{mp} 3 years for all three species represented in the stand and especially to spruce the main species, represent the real volume valorized cuts accidental products in 2011:

- for Spruce species: 815 - ($17,5 m^3$/year * 3 years) = 815 - 53 = 762 m^3;

- for Fir species: 128 - ($2,5 m^3$/year * 3 years) = 128 – 8 = 120 m^3;

- for Beech species: 96 – ($1,6 m^3$/year * 3 years) = 96 – 5 = 91m^3

The following table presents losses increase for all the species that make up the stand (where the majority is spruce species) and to quantify their value

Table 5

Quantifying the loss of value growth for u.a. 75 C

Crt.no.	Species	Regular average loss of growth (m3 / year) -Rounded values-	Losses annual average growth (m^3 / year ha^{-1})	Unit Price species (lei)	Value loss (lei)	
					Per hectare	Total
1	Spruce	53	17,5	171,568	3002,440	9093,104
2	Fir	8	2,5	207,659	519,147	1661,272
3	Beech	5	1,6	66,779	106,846	333,895
Total		66	-	-	3628,433	11088,271

Figure 2 represents graphically economic and financial losses due to disturbances in u.a.75C

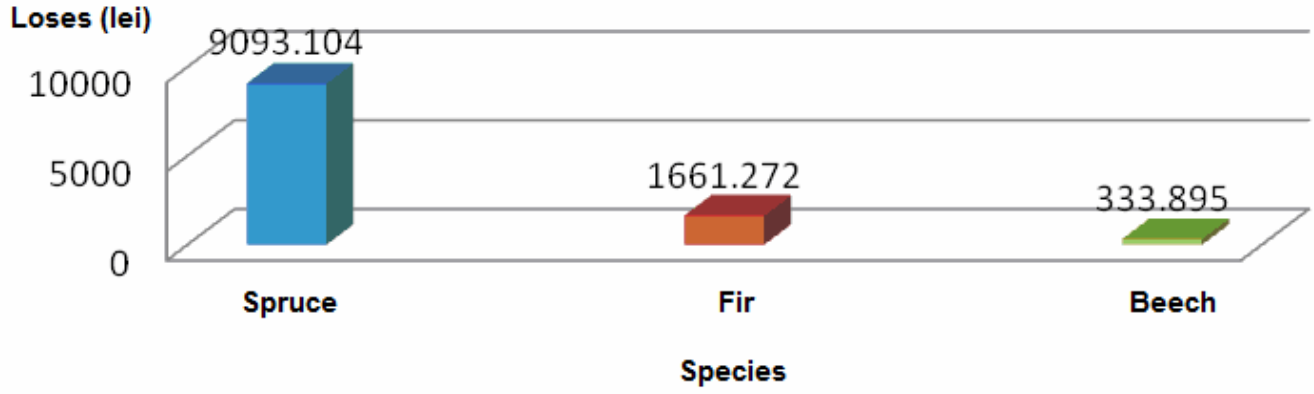

Fig.2. *Quantifying the loss of value growth in u.a. 75C species*

Volume of 973 m^3 derived from accidental cutting of 2011 was capitalized.

Losses for the entire value growth trees in u.a. 75C for a period of 3 years is 12.38% of the wood that was exploited by cutting according to the VPA's last.

The experimental area of u.a. 75D, the stand has the following characteristics:

- Stand age is 60 years

- Area 2.38 ha stand

- Class II production is for all species components stand

- The current composition of the stand is 9 Spruce 1 Fir;

- Consistency of the current 0.2 and 0.7 have a value of 10 years ago;

- Losses caused by biotic and abiotic factors are spread across the entire stand.

By going through the same economic calculation algorithm, the experimental surface (match) of u.a. 75D get:

- by applying the formula (10) for :

- Spruce species result values:

$V_{initialSpruce50} = 536 * 0,9 * 0,7 * 2,38 = 804\ m^3$

$V_{estimatSpruce60} = 627 * 0,9 * 0,7 * 2,38 = 940\ m^3$

- Fir species result values:

$V_{initialFir50} = 430 * 0,1 * 0,7 * 2,38 = 72\ m^3$

$V_{estimatFir60} = 532 * 0,1 * 0,7 * 2,38\ m = 89\ m^3$

- by applying the formula (11) is obtained

$C_{CPSpruce}$ = 940 - 804 = 136 m^3

C_{CPFir} = 89 - 72 =17 m^3

- by applying the formula (12) for each species component of the u.a. 75D is obteinеant:

$C_{mpSpruce}$ = 136/10 = 13,6m^3/an

$C_{mp\ Fir}$ = 17/10 = 1,7m^3/an

The difference between the volume of species spruce estimated $V_{estimated\ Spruce\ 60}$ (940 m^3) and the existing form of exploitation $V_{existingSpruce60}$ the stand (245m^3 according APV's) after extraction volume of cuts accidental, results in a theoretical volume extracted ($V_{extracted}$) during the 10 years, 695m^3.

For species fir $V_{estimatFir60}$ (89 m^3) and the existing form of exploitation $V_{existingFir60}$ the stand (19 m^3 APV's) after extraction volume from accidental cuts in 2011, it follows a theoretical volume extracted ($V_{extracted}$) during the 10 years, 70 m^3.

The difference between theoretical extracted volume ($V_{extracted}$) from accidental cuts and stand by C_{mp} 3 years for the two species represented in the arboretum, especially spruce as main species represents the actual volume of goods valued from accidental cuts in 2011:

- for spruce species: 695 - (13,6m^3/year * 3 years) = 695 – 41 = 654 m^3 ;

- for fir species: 70 - (1,7m^3/year * 3 years) = 70 – 5 = 65 m^3 .

For the two 1 m^3 of beeach and one m^3 of spruce were not calculated loss amount is too small to record losses.

The following table presents losses increase for all the species that make up the stand (where the majority is spruce species) and to quantify their value.

Table 6

Quantifying the loss of value growth for u.a. 75 D

Crt.No.	Species	Regular average loss of growth (m^3 / year) Rounded values	Losses annual average growth (m^3/year ha^{-1})	Unit Price species (lei)	Value loss (lei)	
					Per hectare	Total
1	Spruce	41	5,71	178,130	1017,122	7303,33
2	Fir	5	0,71	166,052	117,897	830,260
Total		46	-	-	1135,019	8133,59

Figure 3 graphically represents the economic and financial losses due to disturbances in u.a. 75 D

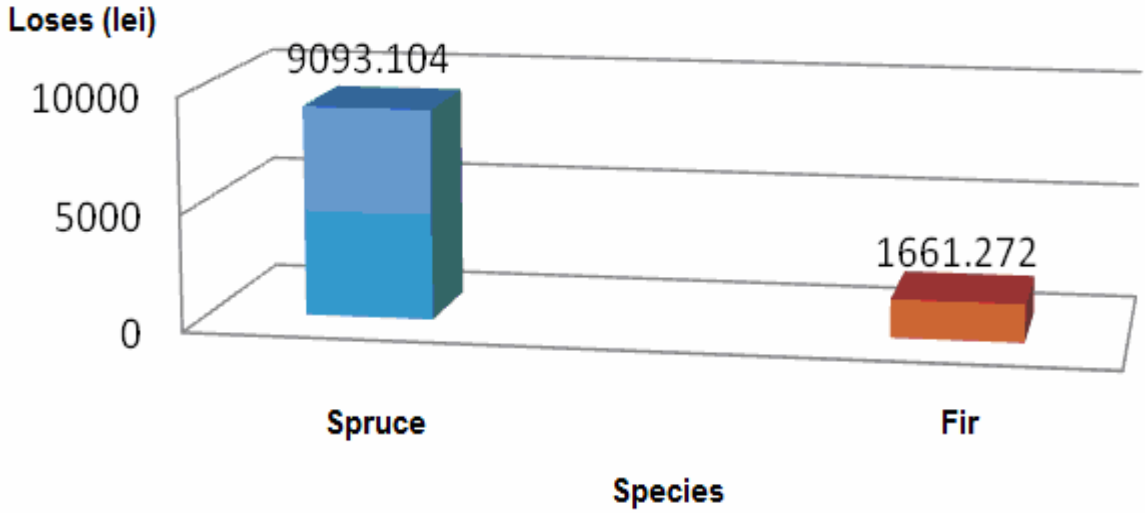

Fig.3. *Quantifying the value of losses in species growth u.a. 75D*

Volume of 719 m^3 derived from accidental cutting of 2011 was capitalized.

Losses for the entire value growth trees in u.a. 75D, for a period of 3 years, representing 17.36% of the wood that was exploited by cutting according to the VPA's last.

The experimental area of u.a. 363D, the trees the following characteristics:

- stand age is 120 years;

- experimental area has 1.0 hectares;

- class production is second all species components of the stand;

- the composition of the current stand is 5 Spruce 3 Fir 2 Beech;

- consistency of the current 0.3, and now 10 years have a value of 0.7;

- losses caused by wind and snow are concentrate to an area of 1.0 hectares of the 2.09 ha as has u.a.

By going through the same algorithm experimental economic area (match) of u.a. 363D get:

- by applying formula (10) for:

- spruce species resulting values:

$V_{initialSpruce50} = 859 * 0,5 * 0,7 * 1,0 = 301\ m^3$

$V_{estimatingSpruce60} = 877 * 0,5 * 0,7 * 1,0 = 307\ m^3$

- fir species resulting values:

$V_{initialFir50} = 810 * 0,3 * 0,7 * 1,0 = 170\ m^3$

$V_{estimatingFir60} = 833 * 0,3 * 0,7 * 1,0 = 175\ m^3$

- beech species resulting values:

$V_{initialBeech50} = 625 * 0,2 * 0,7 * 1,0 = 87\ m^3$

$V_{estimatingbeech60} = 652 * 0,2 * 0,7 * 1,0 = 91\ m^3$

- by applying formula (11) is obtained:

$C_{CPSpruce} = 307 - 301 = 6m^3$

$C_{CPFir} = 175 – 170 = 5m^3$

$C_{CPBeech} = 91-87=4m^3$

- by applying the formula (12) for each species component of u.a. 75C is obtineant:

$C_{mp\ Spruce} = 6/10 = 0,6m^3/year$

$C_{mp\ Fir} = 5/10 = 0,5\ m^3/year$

$C_{mp\ Beech} = 4/10 = 0,4m^3/year$

The difference between the volume of species spruce estimated $V_{estimatSpruce60}$ (307 m^3) and the existing form of exploitation $V_{existingSpruce60}$ the stand (78m^3 according APV's) after extraction volume of cuts accidental, results in a theoretical volume extracted ($V_{extracted}$) during the 10 years of 229 m^3.

For species fir $V_{estimateFir60}$ (175 m^3) and the existing form of exploitation $V_{existingFir60}$ the stand (62 m^3 APV's) after extraction volume of cuts accidental, results in a theoretical volume extracted ($V_{extracted}$) during the 10 years of 113 m^3.

If the species beech $V_{estimateBeech60}$ (91 m^3) and the existing form of exploitation $V_{existingBeech60}$ the stand (78 m^3 APV's) after extraction volume of cuts accidental, results in a theoretical volume extracted ($V_{extracted}$) during the 10 years of 13 m^3 .
The difference between the volume extracted in theory ($V_{extracted}$) of stand by accidental cuts and C_{mp} 3 years for all three species represented in the stand and especially to spruce the main species, represent the real volume valorized cuts accidental products in 2011:

- for spruce species: 307 - (0,6m^3/year * 3 years) = 307-2 = 762 m^3;

- for fir species: 175 - (0,5m^3/year * 3 years) = 175 – 2 = 173 m^3;

- for beech species: 91 – (0,4m^3/year * 3years) = 91 – 1 = 90m^3.

The following table presents losses increase for all the species that make up the stand (where the majority is spruce species) and to quantify their value

Table 7

Quantifying the loss of value growth for u.a. 363D

Crt.No.	Species	Regular average loss of growth (m^3 / year) Rounded values	Losses annual average growth (m^3/year ha^{-1})	Unit Price species (lei)	Value loss (lei)	
					Per hectare	Total
1	Spruce	2	0,6	174,808	104,885	349,616
2	Fir	2	0,5	198,822	99,411	397,644
3	Beech	1	0,4	63,692	25,477	63,692
Total		4	-	-	229,773	810,952

Volume of 973 m^3 derived from accidental cutting of 2011 was capitalized.

Losses for the entire value growth trees in u.a. 363D for a period of 3 years is 2.62% of the wood that was exploited by cutting according to the VPA's last. This shows that with the aging of stands increases are smaller and losses due to default increases are lower, leading to a stand past the age to be almost nonexistent technical exploitability

Figure 4 represents graphically economic and financial losses due to disturbances in u.a. 363D.

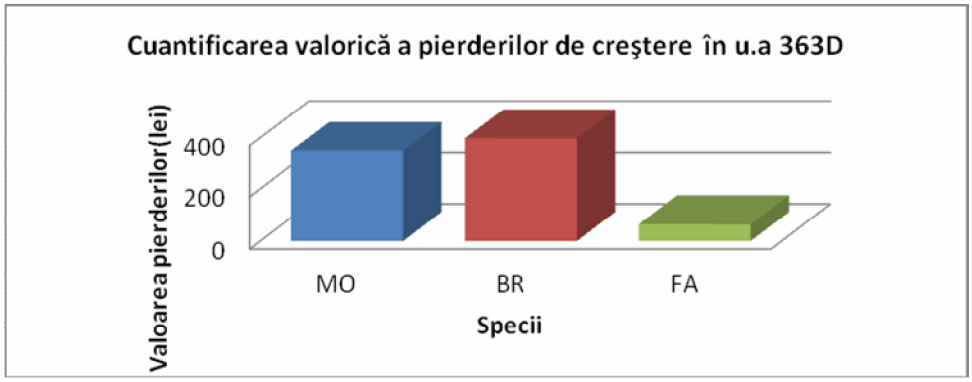

Fig.4. *Quantifying the value of losses in species growth u.a. 363D*

Volume of 973 m3 derived from accidental cutting of 2011 was capitalized.

Losses for the entire value growth trees in u.a. 363D for a period of 3 years is 2.62% of the wood that was exploited by cutting according to the VPA's last. This shows that with the aging of stands increases are smaller and losses due to default increases are lower, leading to a technical exploitability stand past the age to be almost nonexistent.

8. Interpretation of Results and Final Conclusions

Interference between systems, economic and financial, socio-economic and biological systems has led in most cases to major changes in biological systems (ecosystems), quantified value in economic terms as a loss, ie as a deviation from the structure and productivity normal.

Economic systems in their attempt to reach the maximum of organization and technology, thanks to the laws of entropy, get to interact with biological systems with complex ecological structure and change them sometimes irreversible.

Living biological systems have their own laws of organization and functioning. The emergence of harmful factors, abiotic and biotic, resulting in damage created balance and cause major

disruptions, with serious consequences for the economic-financial and social environment that are interrelated with each other.

From the economic point of view everything does not correspond to the normal state of dynamic equilibrium between these triggers are recorded as losses.

Consequently their ecosystems and biodiversity is subject to permanent changes, which affect a lesser or greater extent their stability

Transposed situation where forest systems, increasing losses due to the action of negative factors, such as disruptive high-intensity wind action, snow, leading to disruptions in the chain specific forest systems. Such quantitative and qualitative depreciation timber has negative impact on local financial and social-economic systems in the area. Wood is a commodity that depreciates when under the influence of biotic and abiotic factors disturbing, can not be stored, as if unaffected systems. He must be built as soon as the greater impairment in quality of time, growing economic and environmental losses.

Impaired for forest environmental implications of local direct and indirectly, sometimes difficult or impossible to quantify the value of money. Degradation of forest systems has major impacts on the hydrological system and anti-erosion, leading to flood surrounding areas, but also to climate change because there are no natural balance created in biological systems where there is no disturbance. Once affected forestry systems, sometimes involving very high costs for their restoration that are replenished in a long time. Doborâturile sometimes produced under the combined action of wind and snow are produced precisely stands for superior productivity.

By analyzing the 4 stands under study shows that loss of growth are higher in young trees (commonly appear around the age of 60 years since and increases are more active in this period) and attenuates the stands past the age of exploitability (u.a. 363D).

Considering the forest as an ecosystem, fulfilling both production functions, as well as protection substantiation is based on the concept that biocoenosis and biotope (resort) are inter-linked and interconnected by continuous exchange of matter and energy.

Systems forestry influences evapotranspiration, reduce leakage and a forest ecosystem affected by disturbance no longer can accomplish the optimal role of hydrological, because some precipitation are no longer detained, snow no longer melted slowly and litter is driven by water precipitation, especially if viiturilorilor on slopes and hence appear erosion locally and in downstream areas, bordering appear floods covered with mud fields of culture and clogged reservoirs (in this case the lake from Colibiţa).
Trees affected can not counteract the action of strong winds, they are exposed to permanent degradation, until the emergence of mass windfalls.

Loss hard to quantify economic and financial value are influencing climate zone: the ability of the forest to store carbon and produce oxygen to neutralize pollutants, to enrich the air with negative ions, antimicrobial (fitoncide).

Treatments applied studied stands (u.a 662B, 75C and 363D) are the progressive connection because there are natural seedlings already installed, requiring reforestation percentage of the surface u.a. and created new crop care.

Only unit equipped (u.a.) were proposed cuts 75D races followed by immediate reforestation due to a lack of natural seedlings installed. In this manner it is desired to recover the specific environment of the forest as quickly as possible.

Also, losses in such stands are not only the measurable and assessable in terms of economic and financial; they also ecological, much harder, sometimes impossible to quantify in terms of economic and financial, which lead to climate change major effect of the so-called "snowball rolled" in areas affected by distractions and thus adjacent areas downstream.

Biodiversity and ecosystems are also under pressure. The solution now is to invest in innovation to support a green economy - an economy in harmony with the natural environment to minimize possible effect of climate change.

As you can see, the greater frequency of disturbances due to negative action of biotic and abiotic factors are recorded resorts productivity upper stands that have been made in research productivity is high (grades I and II production).

As a conclusion, influence negative biotic and abiotic factors accentuated by artificiality more intense forest ecosystems due to the creation of monocultures of spruce in plantations, to the detriment of natural regenerations, more stable the proportion of natural species is much better directed the laws of nature. It stands on further creation of mixed genetic material of local origin, more stable ecologically and economically productive.

Notes

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INNOVATIONS IN RURAL MICROFINANCING

Otilia MANTA[95]

Abstract

The progress of financial inclusion is the result of digitization trend of the financial sector, with a major impact on financial institutions. Creating new distribution models (networks of external agents, banks without branch network), the emergence of new opportunities in access management and customer back-office are just some of the challenges microfinance sector has passed through innovation and adaptation continues.

The phenomenon of "Microfinance 3.0 'has created new opportunities for customers: easy management of household savings, revenue collection, payment of bills and taxes. Using it still must become more concrete and consistent in Romania, and customers should be educated to master these new tools digitized. It is indisputable that a revolution is taking place! In the context of the financial crisis, microfinance continues to grow, offering new opportunities digital form, be it access to new customers or help and services provided to beneficiaries.

Rural area , as reported by the EU Rural Review are estimated to generate 48% of the EU's gross value added and provide 56% of the Member States total employment. A typical characteristic of the rural economy is the presence of small and medium-sized enterprises (SMEs), many of which are micro-businesses with a high proportion of self-employment.

Key words: *rural microfinance, rural credit, food security, financial inclusion, rural development.*

JEL classification: Q, Q0. Q1

Introduction

Yet, we are witnessing now at a lot of debates and views that make us say that increasingly more policy makers turn their attention to social and financial inclusion of the countryside. The development of specialized micro financing entreprises in rural areas is the pillar of support for small business and also for the sustainability and a real improving of rural life. A major percentage of rural households shows that they do not have reliable and affordable access to finance for agriculture and other livelihood activities. Many small farmers living in remote areas, where the retail banking is discret or not at all and production risks are high. The recent financial crisis has made even more stringent the credit granting and the need to explore innovative approaches to rural finance more urgent. Innovations in rural and agricultural microfinance have significant potential to improve the food security of the poor. Although the microfinance has been widely studied, there is a big gap of knowledge, especially regarding the possibility of expanding access to finance for rural area and for agriculture. International Institute for Food Research (IFPRI) 2020 Vision, initiative of rural and agriculture finance team in the World Bank was to conceptualize and assemble the concept of microfinance to rural and agricultural knowledge gap by examining innovations in the provision of financial services for rural households and creating innovative tools for effective management of risks faced by the poor in rural areas. A 2006 case study on three leasing providers in rural areas showed that in all three cases, rural portfolios were as profitable as urban portfolios. Arrendadora John Deere, the largest provider of car leasing farm in Mexico had nearly 63 million USD in the lease machinery, DFCU Leasing, the largest provider of The lease in Uganda, had a portfolio worth $ 5 million service leasing in rural areas and network leasing Corporation Limited, a leading provider of microleasing in Pakistan, had a leasing portfolio of over USD 2.4 million in rural areas. Small losses in leasing activity, strong demand from customers for the assets financing and a favorable legal and policy environment have made leasing a lucrative business areas for these companies. For customers, access to finance at a reasonable cost, the demand for fast and easy access to supplier appear to be significant benefits. Based on the

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experiences of suppliers, the study identified the following lessons on the management of financial leasing in rural areas:

- ✓the rural leasing is a way to acquire productive assets. All rural lease contracts offered by the three companies there are the type of financial leasing and were used to finance the purchase of assets (as opposed to renting of assets);
- ✓rural enterprises of different sizes benefiting from the leasing, but a supplier may not be able to serve equally all companies, suppliers capabilities are limited because of differences in skills and capabilities required to effectively serve businesses of various sizes;
- ✓non agricultural enterprises represent a significant proportion that uses leasing in rural areas;
- ✓the leasing activity in rural areas can be profitable, but it needs government support, all three companies studied had access to government funds or from donors, particularly when it came to expanding their operations in rural areas;

for a company focusing on providing leasing services to rural areas just can not be a viable solution, because it is a specialized financial activity with greater economies of scale, high costs and risk factors;

There is now challenged to support the increasing availability of leasing in rural areas. Should be taken in mind that leasing is a viable tool for financing the assets from rural area. The nature and the capacity existent financial institutions, the potential demand for financing investments in rural areas and the development of the leasing industry should establish mechanisms to support increased access to services for rural enterprises. Also, in countries that do not have a clear legal and regulatory framework for leasing will be required the assistance at the government policy level. Such support must be sectoral and not limited to leasing area. A good legal framework for leasing include:

- ✓sharp definitions of a renting contract, leased assets, responsibilities and rights of the parties to a leasing contract;
- ✓clarity in the allocation of liability for third-party losses arising from the operation of the leased assets;
- ✓The provision of priority of claim on a property leased less or;
- ✓a regulated framework for easy and quick repossession of leased assets.

The use of accounting standards internationally accepted and impartial tax code can enhance the development of the leasing sector. The existence of a functional asset register, the availability of insurance and maintenance for equipment at a reasonable cost, and there is a good market for used assets there are also necessary for the development of financial leasing industry. Targeted institutional support may also be required to contribute to the development of the rural leasing. The financial leasing is a relatively complex transaction. To successfully perform the financial leasing operations, organizations not only need to have well-trained staff, high quality (accounting and internal control and risk management of the portfolio as a whole). Types of institutional assistance that can help should therefore include:

- ✓grants for startup costs of leasing operations, thus helping compensate transaction costs and risk of operating in rural areas;
- ✓financing to establish trade links between providers;
- ✓technical support for leasing companies;
- ✓the provision of capital, loans or guarantees, to extend the mobilization of rural areas.

A wide range of leasing companies, banks, financial cooperatives, microfinance could benefit from such support. Institutional support may include capital support when access to long term funds is a critical constraint.

Since the founding of Grameen Bank in Bangladesh in 1976, microfinance activity exploded. On 31 December 2007 those 3,552 microfinance institutions reached 154 million customers worldwide, of which approximately 106.6 million were among the poorest when they took their first loan. Such expansion may be at least partially attributed to the widely adopted practice in microfinance programs, namely lending group. Unlike individual loans, the lending group (joint liability) granting a loan to a group of borrowers, the whole group being responsible for the duty of every individual member of the group. This practice allows microfinance programs rely mainly on accountability and mutual trust between group members, rather than a financial guarantee. Since the poor often do

not have a financial guarantee, the loan programs provides a feasible option the group to extend credit to poor people. There are considerable debates about whether of such groups of achieving repayment performance while serving poor borrowers.

In the present the Commission and European Investment Fund mobilise €237 million in loans to support 20,000 European micro-enterprises under the European Programme for Employment and Social Innovation (EaSI). The European Investment Fund (EIF), which manages the EaSI Guarantee on behalf of the European Commission, and six microfinance institutions are signing guarantee agreements that will open up access finance for micro-enterprises. They will contribute with 17 million euro to the guarantees signed today, which is expected to result in microloans worth 237 million euro.

The six guarantee agreements target those who wish to start or further develop their own micro-enterprises, in particular people who have difficulties in entering the job market or in accessing finance.

These first deals enabling loans contracts to microenterprises will be signed between the EIF and Qredits Microfinanciering (The Netherlands), Association pour le Droit à l'Initiative Economique (France), Microfinance Ireland (Ireland), PerMicro (Italy), Kutxa/ Caja Laboral Popular (Spain) Nextebank (Romania), covering six countries only 5 months following the launch of the EaSI initiative.

EaSI Guarantee and EIF

In total, the EaSI Guarantee of 96 million euro is expected to provide a leverage of more than 500 million euro over the 2014-2020 period in loans in order to promote jobs and growth in Europe for the next 15 years, unlocking a total of 30,800 microloans and 1,000 loans to social enterprises. The 96 million euro guarantee for microfinance or social finance providers is managed by the EIF on behalf of the European Commission.

The EIF will not provide direct financial support to enterprises but will implement the facility through local financial intermediaries, such as microfinance, social finance and guarantee institutions, as well as banks active across the EU-28 and additional countries that are participating in the EaSI programme. These intermediaries will deal with interested parties directly to provide support under the EaSI Guarantee.

Microfinance in Europe is gradually being established as an essential social policy tool for the promotion of self-employment, microenterprise support and the fight against social and financial exclusion. This is demonstrated by the initiatives and support from the European Commission in the framework of the “Program for Employment and Social Innovation (EaSI) 2014-2020.”

In this regard, the European Commission considers the following types of loans as microcredit:

- ✓Business microloan: a loan under 25.000 EUR to support the development of self-employment and microenterprises, and
- ✓Personal microloan: a loan under 25.000 EUR to cover personal or consumption necessities such as rent, personal emergencies, education, etc.

This chapter presents the main characteristics of the European microfinance sector (scale, institutional variety, outreach and sustainability) and identifies major changes within the industry.

The data presented are taken from the latest overview of the European1 microcredit sector, a sample of 150 MFIs from 24 countries for the years 2012-2013. Twenty EU member states are covered by the survey.

Methodology and data sources

Professional considerations. The researcher who assumes the risk of getting an overview of the analysis of the functioning of crediting system in rural areas would have, from the very beginning, some scientific disappointment that our today officials may challenge them. The only aspect, somehow giving hope, is that the system itself works, not for the benefit of the majority of the rural population, but for a few landowners or processors.

Theoretically, the rural population's access to bank loans is allowed for all those who want to invest. Basically, the statistics indicate that more than **85% of the active population in rural areas have no access to rural credit**. In most cases, the financing support of rural producers is achieved by European subsidies, rather than by national ones.

Saying that, the conclusion is under the circumstances, the only solution for the recovery of the Romanian village is setting up a accessible system for crediting the whole working population. From the perspective of such a goal, the financial and banking support for business in the rural sector is currently the main challenge of the government authorities and, especially, of the financial environment, particularly the banking sector.

Scale and development of the microfinance sector in Europe

During 2012-2013, both the total overall volume and the number of microloans2 show steady growth among the MFIs surveyed compared to previous years.

MFIs from the 24 countries surveyed disbursed a total of 387,812 microloans with a total volume 1.53 billion EUR in 2013 (2011 benchmark: 204,080 microloans with a total volume of 1.05 billion EUR). The trend is the same for organizations based in EU member states only: 207,335 microloans with a total volume of 1.26 billion EUR (2011 benchmark: 122,370 loans with a total volume of 872 million EUR).

Compared to the 2011 data, these figures translate to a 45% increase of the total value of microloans and a 69% increase in the number of loans reported by the EU-based participants of the 2013 survey. Since 2009, the number of loans disbursed has increased by more than 400% and the reported total loan volume has more than doubled indicating remarkable growth of the observed micro– lending activities among the surveyed European MFIs

The allocation between microloans for business and personal use has slightly shifted towards loans for business purposes. In 2013, 79% of the total value of microloans was issued for business purposes and 21% for personal consumption (2011: 74% business purpose, 26% personal consumption).

Overall, these results show the increasing scale (both in terms of numbers and total volume) of microfinance provision in the EU from 2011-2013. Three aspects have contributed to this development: an increased coverage of organizations in certain EU-member states, more loans provided per institution covered (e.g. in France) and a higher average loan size per institution. The average loan size disbursed in 2013 was 8,507 EUR (2011: 5,135 EUR). For EU member states, the average volume was 9,234 EUR, which is an increase compared to the 2011 value of 7,129 EUR.

Institutional types and missions

Institutional diversity in the sector remains high. Non- governmental organizations (NGOs) or foundations, non- bank financial institutions (NBFIs), governmental bodies, savings and commercial banks, credit unions, cooperatives, community development financial institutions, microfinance associations and religious institutions are all active in the provision of microcredit in Europe. For 2013, the institutional distribution shows that NBFIs (29%) and NGOs or foundations (23%) account for more than half of all surveyed organizations. While the share of NGOs and foundations is similar to the share identified by the last survey in 2011 (22%), the share of NBFIs in the sample has risen compared to 2011 (20%). The prevalence of both institutional types is also observable in the subgroups of small, medium and large MFIs.

The stated missions of the surveyed organizations also show a high diversity with regard to economical and societal policy goals. Microenterprise promotion is the most widespread goal, with more than two thirds of all surveyed organizations including it as part of their mission followed by job creation (58%), social (56%) and financial inclusion (50%). Organizations with a specific focus on women and migrant empowerment form a smaller part of the surveyed organizations (29% and

20% respectively). The vast majority of the surveyed MFIs (85%) include at least one dedicated employment goal in their mission (microenterprise/SME promotion and/or job creation).

Financial performance and sustainability

A major issue for the European microfinance sector is the question of organisational sustainability.

In terms of portfolio quality, the total value of the microcredit portfolio affected by overdue loans for more than 30 days was lower for both 2012 and 2013 (2012:

12.8%, 2013: 13.1%) compared to 2009 (16%), although a bit higher than in 2011 (12%). This illustrates an ongoing trend in the microloans sector, as institutions with lower portfolio at risk have lower impairment loss expenses and higher return on assets. Although the overall situation for portfolio at risk shows a positive evolution, PaR30 remains quite high for some European countries.

Regarding profitability, microfinance providers manage to achieve positive return on assets (2012: 6.7%, 2013: 5.6%).

With respect to cost structure, the surveyed institutions decreased their expenses compared to 2011 with an operating expense ratio of approximately 18% in 2013. In combination with lower impairment losses, this the rural entrepreneurial environment in Europe

Entrepreneurship depends not only on the presence of entrepreneurial individuals in an area or community but is also strongly reliant upon the socio-economic context. According to the EU Rural Review4 the entrepreneurial environment can be seen as “the inter-connected set of factors that encourage innovation, promote risk-taking and foster the emergence and growth of new enterprises” including “various sources of information, different resource providers, markets, technologies and numerous intermediaries that facilitate the processes associated with business start-up and development.” To foster entrepreneurship, the simple presence of these factors is not enough. In fact, the combination and interaction of these characteristics is also fundamental to stimulate entrepreneurship.

Within rural areas, barriers to entrepreneurial initiative include the specific economic conditions of rural environments and the characteristics of rural entrepreneurs. Therefore in rural areas, a deep understanding of the challenges to entrepreneurial stimulation is important. The ESoF research project5 has further developed the concept of entrepreneurial environment focusing on rural areas. The project analyses the economic, social and cultural factors that influence the development of entrepreneurial skills in rural areas with particular reference to farmers. The main findings of the project draw a distinction between external and internal entrepreneurial environments.

Accordingly, the external entrepreneurial environment is represented by the social and business context in which rural entrepreneurs operate. This includes the repercussions of the globalisation processes and the policies adopted at the EU and national level, the demand from consumers, the supply chains structures in place, climate and energy trends as well as environmental issues.

Conversely, the internal entrepreneurial environment is associated with the skills and competences of the rural entrepreneur, including both the business skills necessary to run an enterprise (sectorial expertise and managerial competency) and the skills needed to deal with changes and grow the business (opportunity, strategic and networking skills).

In order to boost the variety of entrepreneurial businesses in rural areas, it is fundamental to improve both external and internal entrepreneurial environments.

The EU Rural Review (2011) highlights three categories of obstacles to rural entrepreneurship. The first category relates to the small size, low population densities and remoteness of rural communities. The second category concerns the social and economic composition of rural communities. Finally, the nature of internal and external links also strongly affect the rural entrepreneurial initiative. Given these constraints, the provision of microfinance has emerged as a powerful tool to support and empower rural entrepreneurs to improve both the internal and external entrepreneurial environment.

Microfinance in rural areas

The provision of financial and non-financial services could help entrepreneurs to overcome the challenges to rural development, thereby supporting their businesses and boosting the local economy. In this regard, microfinance often targets unemployed or people excluded from the traditional banking system who wish to start their own business, significantly contributing to self-employment and job creation.

According to CGAP6 rural microfinance encompasses the provision of a range of financial services such as savings, credit, payments and insurance to rural individuals, households, and enterprises (both farm and non-farm). It includes as well the financing for agriculture and agro-processing such as supply of inputs, production, distribution, wholesale, processing and marketing.

Some challenges faced by rural MFIs are similar to those facing any MFI while others are specific to rural organisations that provide loans for farm-based activities. According to USAID7, the following factors constrain both the supply and demand for finance in rural and agricultural areas:

- ✓ High transaction costs for both borrowers and lenders;
- ✓ Low population density and dispersed demand;
- ✓ Limited economic opportunities available to local populations;
- ✓ High risks faced by potential borrowers and depositors due to the variability of incomes,
- ✓ exogenous economic shocks and limited tools to manage risk;
- ✓ Seasonality – potentially affecting both the client and the institution;
- ✓ Heavy concentration on agriculture and agriculture related activities exposes clients and institutions to multiple risks;
- ✓ Lack of reliable information about borrowers;
- ✓ Lack of market information and/or market access;
- ✓ Weak institutional capacity;
- ✓ "Crowding out" effect due to subsidies and directed credit;
- ✓ Lack of adequate or usable collateral (lack of assets, unclear property rights);
- ✓ Inhospitable policy, legal and regulatory frameworks;
- ✓ Undeveloped legal systems, inadequate contract enforcement mechanisms; and,
- ✓ Undeveloped or inadequate infrastructure.

Although this list relies mainly on experiences in developing countries, it provides a useful and comprehensive insight into the challenges facing European MFIs. Clearly, MFIs operating in rural contexts do not have the possibility to choose the challenges they will face and these challenges frequently reinforce and compound upon each other. The next section presents examples of European MFIs able to overcome some of the constraints mentioned above with the use of innovative methodologies and strategies.

Good Practices of rural microfinance in Europe

Bearing in mind the constraints to rural microfinance, a compilation of 15 good practices from 10 countries covering both Western and Eastern Europe is presented.

According to Triodos Facet good practices are "all the strategies, plans, tactics, processes, methodologies, activities and approaches that are documented, accessible, effective, relevant and fundamentally accepted, developed by professional organisations and put into practice by well trained personnel. These measures have proven to be in keeping with the legislation in force, tested and put into practice, through research and experience. Consequently, they have proven to be effective and able to live up to expectations. It has also been established that they can be easily modified and improved according to context."

Given this definition, the good practices presented in this publication are examples of European MFIs supporting the entrepreneurial initiative in rural areas. To facilitate the extraction of common lessons learned, the good practices have been grouped into five categories:

1) communication and promotion,
2) partnership development,
3) products and services,
4) technological innovation and
5) value chain approach.

However, some cases span across multiple categories as they have a wider scope.

Table 1

Good practices overview by category

Good Practice Category	Good Practice title	MFI	Country
Communication and Promotion	Adie mobile van to develop new areas	Adie	France
	EKI Business club	EKI	Bosnia and Herzegovina
Partnership development	Successful rural microfinance through collaboration between MFIs and banks	AgroInvest	Serbia
	Airdie agricultural and rural division	Airdie	France
	Microcredit Support Measure of the Government of the Azores	Cresaçor	Portugal
	Solidarity alliance for small business loans	Mag 2 Finance	Italy
Products and Services	Savings & Credit Associations model	Albania Savings and Credit Union	Albania
	Flexible agri-loan products	Horizonti Microfinance	Macedonia
	Relationship-based microcredit for rural clients	Kreativ Finanz Mecklenburg GmbH	Germany
	Client segmentation as a new approach in rural market	Savings Bank Moznosti	Macedonia
Technological Innovation	Internet-based loan Management System	Fejer Enterprise Agency	Hungary
	Tablet technology as a tool for improving service to small rural farmers	Opportunity Bank Serbia	Serbia
Value Chain approach	More than a loan	SIS Credit	Bulgaria
	Rural Employment Generation Activity	Partner Microcredit Foundation	Bosnia and Herzegovina
	Rural Empowerment and Economic Development through Value Chain Integrated Projects	Vision Fund	Albania

Source: EMN, 2015

Indicates overall decreasing expenses, which might lead to an improvement of the financial sustainability in the sector.

Overall, an ongoing trend of decreasing impairment losses and operating expenses is observed, which might lead to improvements in financial sustainability.

Outreach to target groups

The availability of data on the outreach of European MFIs to specific target groups and social performance indicators remains limited. The results of the survey indicate that women continue to be underrepresented as a target group (compared to the gender balance in the total population), although to a lesser extent than in the previous years. Information on outreach to ethnic minorities and immigrants is even scarcer.

With regard to rural populations, the available data show that only 24.3% of MFIs reported to serve rural populations in 2013. In general, the country reporting the highest share of loans disbursed to rural clients is Bosnia- Herzegovina with over 123m EUR in 2013 or 64% of the total value of microloans disbursed in the country. The ten institutions surveyed from Poland provide the second highest value of rural microloans disbursed with over 90m EUR in 2013 (46% of the total value of microloans). This outcome might be related to higher agricultural activities in those countries relative to the overall economy. The 17 surveyed Romanian MFIs disbursed more than 37m EUR in 2013 to rural clients, 36% of the total value of microloans disbursed by surveyed institutions in the country.

Microfinancing models in the agriculture activities

Agriculture is an economic activity inherently risky. A variety of uncontrollable factors affect production and prices, which is reflected in highly variable economic yields of farms. In developing countries farmers do not have access to modern means of measurement and management of risk, such as agricultural insurance, futures or guarantee funds and post-emergency government assistance. Thus, farmers rely on different strategies and techniques "traditional" survival and risk mitigation. Most of them, however, are ineffective. Creditors from the formal banking system avoid microfinancing agriculture for a number of reasons: the high cost of service delivered, information asymmetries, lack of branch networks, perceptions of low profitability in agriculture, lack of collateral, high levels of poverty in rural areas, a low level of financial education of the farmers. But, mainly executives around the world say that banks do not finance agriculture due to the high risk - in the production and price - facing the sector. A farmer may be a good manager, capable and hardworking, with an excellent reputation for good payer when it comes to repayment, with guaranteed access to a market to trad the harvest and with the technical assistance of high quality, but a drought unexpected (or flooding) they may cancel these benefits. In the developing countries, with an agricultural market at a high level and with a fair distribution on integrating commercial, the great farmers can escape from this predicament because they have the ability to purchase insurance policies at a good price, can obtain funding or to liquidate assets quickly in a crisis caused by natural calamities, etc. Creditors from the formal financial institutions tend to exaggerate by using property as collateral primary buffer against the risk of default, which means it provides services to a limited segment of the farming community. For small and medium farmers, who constitute the vast majority of farmers who often have secured land - which is the preferred type of collateral, the value of the land may be insufficient to cover the loan.

Conclusions and considerations regarding the importance of microfinance. Learning from good practices in Europe

A lesson learned is knowledge or understanding gained by experience that has a significant impact for an organization. It comes from solving real problems and the collection and dissemination of lessons learned could help to eliminate the occurrence of the same problems in future projects.

Following the presentation of 15 good practices that allowed us to explore innovative approaches and methodologies in rural microfinance, the present chapter tries to identify lessons learned that could assist European MFIs facing the same challenges.

As the provision of rural microfinance requires MFIs to adopt innovative responses in order to reach rural entrepreneurs in an effective and sustainable way, practitioners might find these lessons learned useful to design future strategies.

Taking stock of the good practices collected, a set of common lessons learned emerge:

- ✓ A value chain approach facilitates the adoption of innovations by clients and increases the profitability of rural businesses. For MFIs, it is important to develop market linkages between businesses, suppliers and final markets. In fact, contractual arrangements between producers and sellers and/ or suppliers reduce price risk, enhance production quality and helps guarantee repayment. In order to be more effective, these arrangements could combine technical assistance and provision of specified inputs on credit.
- ✓ The development of partnerships and alliances with existing institutions and infrastructure may facilitate increased outreach and the provision of diverse services, thus ensuring better conditions for rural clients. Collaboration with governments and local NGOs/associations, partnerships with commercial banks or the development of innovative alliances including new stakeholders (e.g. rural entrepreneurs' clients) can be beneficial to better reach out and cater to the needs of rural entrepreneurs.
- ✓ The development of flexible products and services tailored to the needs of rural farmers/entrepreneurs is crucial for rural outreach. Flexible disbursement, repayment schedules and guarantee schemes allow MFIs to attract more clients. Nevertheless, the terms and conditions of the loans should not compromise MFI sustainability (portfolio quality, liquidity management, etc.). A key role in assisting rural clients to define loan terms and conditions is played by the loan officer, who should be carefully chosen from rural areas, well trained and visit clients in the field.
- ✓ Technology reduces transaction costs for both lenders and borrowers and creates the potential for sustainable rural finance. MFIs introducing technological innovations into their operations are able to reduce the higher transportation and communication costs found in rural areas. The training and commitment of loan officers and back office staff are critical for a successful introduction of non-traditional tools.

Before reviewing the lessons learned for each good practice, we want to stress the heterogeneous context of MFIs operating in rural Europe. European MFIs work across a number of countries that differ in terms of regulatory framework, governmental welfare policies and public support to the microfinance sector, level of socio- economic development, rural context inherent features, infrastructures, etc. Due to this variety of factors (and the various institutional types from small NGO to established bank), the application of some of the lessons learned out of the original context could be difficult.

Keeping this in mind the following table presents the full set of lessons learned for each good practice collected.

Table 2

Lessons learned

MFI	Good Practice	Category	Lessons Learned
Adie (France)	Adie mobile van to develop new areas	Communication and Promotion	The temporary presence of loan officers in rural areas not covered by MFI branches tests customer demand and opens the possibility to seize promising new market opportunities.
			The presence of loan officers in underserved rural areas via mobile vans improves MFI visibility, builds trust and confidence and allows the MFI to reach strategic locations at low cost.
AgroInvest (Serbia)	Successful rural microfinance through collaboration between MFIs and banks	Partnership development	In the absence of national regulation for the provision of microfinance, MFI and commercial banks partnerships allow for outreach to the rural unbanked.
			Such partnerships are successful only if both sides acknowledge, understand and respect the differences in organisational cultures, and are fully aware of their individual added values. It also requires individual champions on each side.
Airdie (France)	Airdie agricultural and rural division	Partnership development	A partnership approach involving regional government, MFI and local social economy organisations allows the provision of flexible loans at favourable conditions (zero interest rate) supported by business development services. In the long run, this approach should aim to facilitate the rural entrepreneur's access to the mainstream banking sector.
			Demonstrated public sector savings on unemployment benefits allows the MFI to create solid and fruitful partnerships with public authorities.
Albanian Savings & Credit Union (Albania)	Savings & Credit Associations model	Products and Services	Savings and Credit associations have strong social rooting in rural, local communities allowing the implementation of social guarantees (a member guaranteeing for other member). This methodology lets the MFI overcome the absence of collateral and increases the financial inclusion of rural clients.
			Membership-based organizations can facilitate rural access to financial services and be viable in remote areas.
Cresaçor (Portugal)	Microcredit Support Measure of the Government of the Azores	Partnership development	A partnership approach involving the mainstream financial sector, regional government and social economy sector allows the provision of favourable loan conditions and a set of comprehensive, tailored services fostering entrepreneurship in rural areas.
			The support of a qualified multidisciplinary team during the entire loan cycle empowers the rural entrepreneur and enhances the sustainability of the business proposal.

EKI (Bosnia and Herzegovina)	EKI Business club	Communication and Promotion	The advertising of business opportunities and the creation of connections among MFI customers could improve the potential market for rural clients.
			Rural clients need to be connected across traditional communication channels. Future adoption of the online tool by rural clients should be facilitated by the MFI.
Fejér Enterprise Agency (Hungary)	Internet-based loan Management System	Technological Innovation	Economies of scale in the provision of online services allows MFIs to reduce costs and reach rural clients in the most remote areas not covered by branches.
			Technology can help reduce the higher transportation and communication costs found in rural areas
Horizonti microfinance (Macedonia)	Flexible agri-loan products	Products and Services	The development of flexible products tailored to the needs of small, rural farmers allows MFIs to attract more clients and retain those who have difficulties in managing equal instalment schedules while keeping PaR30 under control.
			In order to be successful, the introduction of flexible agri- products should be preceded by a thorough analysis of the rural client's business, piloted in selected branches, backed by robust and scalable MIS and continuously updated through client feedback.
Kreativ Finanz Mecklenburg GmbH (Germany)	Relationship-based microcredit for rural clients	Products and Services	The provision of personalized and flexible loans, together with close monitoring and tailored support procedures, builds trust and confidence in the MFI and reduces rural clients' risk of default.
			Loan terms and conditions that are adjusted to accommodate cyclical business (and exceptional) needs should not compromise MFI sustainability.
Mag 2 Finance (Italy)	Solidarity alliance for small business loans	Partnership development	Innovative alliances between small farmers/producers and their clients are emerging. In this context, small farmers/ producers could be financed by their clients together with the MFI.
			Co-financing schemes allow MFIs to improve the size and conditions of the loan, thereby reducing the level of risk borne by the institution.
Opportunity Bank (Serbia)	Tablet technology as a tool for improving service to small rural farmers	Technological Innovation	Adoption of technology that cuts loan processing time (e.g. tablets) increases loan officer productivity and reduces travel time and expenses to reach rural clients in the field.
			Faster loan processing technologies should be backed by robust and scalable MIS, a suitable loan methodology, quality portfolio and comprehensive data on clients. The training and commitment of loan officers and back office staff is also crucial for the successful introduction of non-traditional loan processing tools

Partner Microcredit Foundation (Bosnia and Herzegovina)	Rural Employment Generation Activity	Value Chain approach	A comprehensive value chain approach based on the development of innovative agri-products, the provision of technical assistance, the selection of qualified suppliers and the development of market linkages facilitates the adoption of new and more profitable agricultural practices by rural clients.
			The role of technical advisors is fundamental in raising awareness among rural farmers on new crops and techniques. Brochures and videos on the advantages of new techniques could also be beneficial.
Savings Bank Moznosti (Macedonia)	Client segmentation as a new approach in rural market	Products and Services	The segmentation of the agricultural clients (e.g. according to their level of income and asset ownership) and the development of tailored products for each segment enables clients to develop their business and prevents over-indebtedness. If well implemented, client segmentation can also improve MFI portfolio quality.
			Segmentation of the target group policy should be backed by solid MIS, loan management procedures and credit committees.
SIS Credit (Bulgaria)	More than a loan	Value Chain approach	The provision of a wide range of integrated consultancy and financial services could complement the disbursement of the loan, allowing clients to boost the efficiency and profitability of their businesses.
			A value chain approach that connects rural clients with urban markets (e.g. creating cooperatives to sell products in the cities) could guarantee better trading conditions for clients and a higher repayment rate for the MFI.
Vision Fund (Albania)	Rural Empowerment and Economic Development through Value Chain Integrated Projects	Value Chain approach	The improvement of farmers' business and entrepreneurial skills, the supply of technical expertise and the development of a value chain strengthening farmers' linkages with the final market improve the clients' repayment rate and business profitability.
			In order to effectively fight extreme poverty in rural areas, partnerships between socially oriented MFIs and non-profit organisations to support very poor households could be developed.

Source: EMN, 2015

In short, activity of the risk management need to be improved dramatically so that agricultural finance can flourish. Steps have been made in recent years by reducing information problems and transaction costs through peer-group lending. However, uncontrolled risk continues to be a major impediment to the development of rural financial markets effectively. Public-private efforts should be renewed and larger amounts of investment will be needed at various levels to address these issues. At the farmer level, the governments should stimulate the recovery of agricultural extension services while farmers must become financially literate in so they can take some risks. Governments, donors, and insurance companies should work together to develop yield-insurance products that are cheap, durable and designed properly. Governments, stock exchanges and financial institutions also must work for the development of structured financial products, and other hedging instruments to reduce price risk. I confess that personal concerns on issues related to financial and social inclusion of SMEs in rural areas, especially small farmers dates back to when I started to develop some investments and support services in rural areas. In most cases, potential

investors and farmers were connected to the market economy system only through small grants, European and / or national granted per area or per animal. Starting from the "main priorities and measures for the development of the regions selected from the such strategies for Regional Development Fund, integrated into the structure of the priority objectives and appropriate measures contained in the National Development Plan" and linking with microfinance measures in the context of the nowdays european economy, I believe that the proposed topic through research conducted within its framework, could help to develop a model to support microfinance in rural Romanian. Global measures taken by world leaders at the Summit in Seoul November 11 -12, 2010, namely those on balanced growth with direct impact and corporate social responsibility makes us say that increasingly more world leaders concerned with creating models dfor financial and social inclusion of the poor. Also in this summit were discussed topics related to the reform of international financial institutions, strengthening the global financial safety mechanisms and, in a separate session the new G20 agenda on development. In carrying out and rationale of this work I start from studies and scientific works of the most awarded personalities in Romania, whose work examines with great probity fundamental problems of Romanian sustainable development in rural areas. I will announce a few of these studies and themes: Romania's national agricultural project after two and a half decades of "reform, restructuring and adjustments"; Security and the nation's food balance; The main challenges of the countryside; The performance restrictive factors of Romanian agri-food economy: agro disintegration, disruption between agricultural production and food processing, agro-food chains inaccuracies in operation, subsistence and semi-subsistence farms domination, promoting forms of financial support that stimulate productive performance; Developments in post-revolutionary agrarian structure; Conception erros in agricultural settlement on the principles of market economy; The characteristics and current structure of rural areas; The governmental agricultural support policies; Initiative for a new philosophy of Romanian rural development; 10 years when the food sector and development of Romanian rural area was mainly supported by EU funds: what could be the consequences?

Sooner or later, the romanian financial system will be forced to align to the practices of countries with a developed agriculture microfinance system, to address new innovative models in microfinance through modern means at current moment. After a period of searching and calling some improvisation, I believe that we are at the stage where we are obliged to approach decisions leading to the reestablishment of new principles of institutions to provide lending to local actors and sectors vital to the economic consolidation of settlements and human welfare. It is about the establishment of institutions specialized in microfinance to fund economic units with legal personality: non-bank financial institutions in rural areas, which crediting legal entities and individuals active: institutions that microfinance only educational and health institution or rural area. The capital required to set up such institutions should be ensured through government financial contributions for which payment to be repaid in time. Another extremely important in creating innovative models of microfinance is given continuous training of human capital involved in providing financial services in rural areas and in the financial education of those who accessed microcredit. At the European and global level decision makers currently trying to accomplish Programme for microcredit financing in rural areas, concerns and decisions that may directly influence the development of activities in rural areas through access to microcredit. To achieve this goal of setting an innovative and coherent microfinance rural environment should be started from what was good in the lending system areas in Romania in the interwar period, especially from innovative models existing today in some countries of the Union European and creating our own innovative models of microcredit.

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THE ROLE OF ENTREPRENEURSHIP IN ECONOMIC GROWTH. COMPARATIVE ASPECTS ROMANIA VERSUS EUROPEAN UNION

Nicoleta MIHĂILĂ[96]

Abstract

There is a general appreciation regarding the major role that entrepreneurship along with innovation plays in economic competitiveness and job creation on a global scale. Stimulation of the SME sector should be made, in our opinion, by providing a competitive, stable and predictable business environment. In this context, public policies aimed at developing entrepreneurship in Romania, should have in the foreground entrepreneurship education at all levels, simplified and predictable regulatory framework and a competitiveness-oriented access to finance. In this paper we develop a comparative analysis of entrepreneurship in Romania and the EU, we highlight the main difficulties encountered by entrepreneurs and will propose solutions for its development into a friendly economic environment.

Keywords: SMEs, competitiveness, fiscal framework**,** entrepreneurial education

JEL Classification: H26, H27, H32

Introduction

Entrepreneurship is a source of innovation and change, and thus stimulates productivity growth and economic competitiveness. Entrepreneurship is closely related to knowledge and flexibility, two factors that have gained new significance as a source of competitiveness in a world economy becoming more globalized. Along with technological changes and intensified global competition brought by globalization and economic liberalization, the assumption that encouraging entrepreneurship represents to encourage the competitiveness of a country, it seems more valid today than ever.

Aspects regarding entrepreneurship in the actual economic context

Supporting entrepreneurship has become a priority as a solution for exiting the crisis and cessation the worrying rate of unemployment. In recent years, governments have been constantly allocating resources for the recovery of enterprises in various forms of aid: loan guarantees, tax grants, credits for research and development aimed at forcing innovation or encouraging startups.

Also, more frequent are the programs for stimulating environment investments, with impact on energetic efficiency and reducing carbon emissions. In many countries, public spendings for renewed economic growth are accompanied by measures for long-term sustainable development and “green” growth. For example, in 2009, South Korea has invested 79% of the economic stimulus package in "green" activities, representing 7% of GDP, while China and Australia have targeted 34% and 21% of the recovery package to "green "investments, respectively 5.2% and 0.9% of GDP. During this period the "green entrepreneurship" began to be seen more than a fashionable trend, it has become a key element in economic policies orientation.

Europe lags behind other regions of the world, regarding the place of entrepreneurship in society. Thus, from the career option perspective, average percentage of citizens who prefer to be self-employed is 71% in China and 55% in the US, while in Europe only 45% of people would choose as an alternative the entrepreneur status, the rest preferring the employee status. With regard to society's perception about the role of entrepreneurs, 85% of Americans, 87% of Chinese citizens and 88% of Europeans appreciate entrepreneurs for their role in job creation. The impact of entrepreneurial education is considered important by 51% of US citizens, 53% of Chinese and 25% of Europeans. This gap is not necessarily caused by the idea of entrepreneurship rejection by

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European citizens, but rather is the result of structural, administrative and cultural factors that inhibit entrepreneurial spirit.

However, Europe needs more entrepreneurs, more viable firms, and more jobs. It is well known that new companies are the main source for new jobs. In Europe, there are yearly created 4.1 million jobs by start-ups only. It is estimated that the average employment rate would be negative in the absence of jobs created by startups. But there is the risk that in the present period, characterized by economic environment turbulence, many firms can not survive unless the growth and business development are institutionally supported.

Although operating in a single market becoming more and more diversified, governed by common standards, the situation of enterprises from various EU countries is different and marked by discrepancies. Businesses from the new Member States became part of pan-European supply chains, which helped them to restructure and increase their exports. At the same time, Western European companies have switch production to emerging economies, investing or relocating their factories in these countries. Thus, it can be distinguished a distribution of opportunities in the regions of Europe, between states with a high entrepreneurial profile, that adapt easily and exploit market integration, on the one hand, and the countries of Central and Eastern Europe, benefiting from foreign investment, but depending on investors savings.

Countries with more effective regulatory systems increased productivity, became more competitive at international level, intensifying exports and increasing jobs. In any of these, there is always a positive correlation between the regulatory framework for business environment, enterprise development and attracting investors. Simplifying legislation and reducing administrative burdens lead to increase in number and size for firms, to strengthen certain economic sectors and successful functioning in the single market, but can equally support exports outside the EU and attract foreign direct investment.

Countries where governments have supported entrepreneurship by improving business infrastructure and facilitating access to credit for financing investments had the best performing economies. Overall, European regulations with direct or indirect impact on business are more burdensome than those applied in the US or Japan, but here there are also differences between Member States. Thus, northern and western European countries have a better regulatory framework compared to those in southern and eastern Europe. Sweden, Finland and Norway are better placed than the rest of Europe, in terms of the balance between quantity and quality of regulations for business and are in-line with the most advanced countries in the world due to efficient administrative systems.

In this context, characterized by certain limitations, but also by a number of opportunities, entrepreneurs and businesses are able to meet many expectations. Expectations from the society are that companies to create jobs and protect the environment, stakeholders seek to make profits, while governments are concerned that they pay taxes, dues and social contributions or to generate export.

EU enlargement and the creation of internal market based on free circulation principle of goods, services, capital and labor had strengthened the favorable position of European enterprises within global competitiveness. Europe exports goods and services amounted at more than 40% of GDP, much higher than the average of Organization for Economic Cooperation and Development (OECD).

Support measures for entrepreneurship in EU. Measurement indicators

As globalization increasingly influences the world economy, the dynamism of entrepreneurship is seen as a factor that contributes to strengthening the knowledge economy, to solve the social and environmental issues. Entrepreneurial policies are increasingly closely correlated with innovation, oriented at creating new products and services, by harnessing both meanings of the knowledge economy. Supplementing and intensifying measures to promote entrepreneurship at all levels (european, national, regional) has been an assumed objective, starting with 2008, in EU strategic documents.

Thus, there have been adopted:

- *Europe 2020 Strategy*. In a rapidly changing world, the EU wants to become an intelligent, sustainable and inclusive growth. Intelligent growth aims at an economy based on knowledge and innovation. Sustainable development requires competitiveness and resource efficiency. Inclusive growth relates to a higher rate of employment in the economy, generating economic, social and territorial cohesion in the EU. These three priorities are mutually supportive and are able to help the EU and Member States to achieve a higher level of employment, productivity and territorial cohesion.

- *Small Business Act for Europe***,** *2008***.** Promoting growth and competitiveness of SMEs, while modernizing the public administration in order to improve the business environment, are central priorities of the European Commission communications "Small Business Act for Europe", in 2008 and "Review of the Small Business Act for Europe", in 2011. The two public policy documents cover the main issues affecting European SMEs throughout their life cycle.

- *Small Business Act reviewed, 2011***.** SBA review in early 2011 reiterated the opinion that Member States should intensify their efforts to promote entrepreneurship and SMEs, to support entrepreneurial spirit in the difficult economic climate. The Commission is determined to continue giving priority to SMEs.

- *Action plan for development of entrepreneurship in the EU in 2020* aims to boosting entrepreneurship in Europe in the 2020 perspective, by unlocking the potential for growth and jobs. Drafting the action plan relies on consultation of policy makers, SMEs, organizations and citizens of the European Union.

Entrepreneurship Indicators Programme (EIP) developed by OECD and Eurostat, which produces and disseminates a new set of indicators focusing on the comparability of data and frequency of the reporting period. The program aimed to develop complex measurements of entrepreneurship, based on a simplified new conceptual framework that distinguishes between the manifestation of entrepreneurship, factors influencing it and impact of entrepreneurship in the economy and society.

The figure below illustrates the structure of indicators of EIP:

Determinant factors	Entrepreneurial performance indicators	Impact
Regulation framework *Market conditions* *Finance access* *Creation and knowledge dissemination* *Entrepreneurial abilities* *Culture*	*Firms* *Jobs* *Wealth*	*Job creation* *Economic growth* *Poverty reduction*

Fig.1. *The structure of indicators of EIP*

Source: Post-Privatisation Fundation, 2012,
"Promoting entrepreneurship as a key factor for economic development"

We observe that within determining factors, the regulatory framework is of particular importance, meaning in fact administrative barriers to starting a business, administrative barriers to increasing, regulations on bankruptcy, regulations on safety, health and environment, regulations on products, taxation and social taxes, business taxation and capital.

EIP system indicators have not experienced the same level of development in all countries. Some of these were included in ordinary data collections, while others were included in the statistics by a small number by states. Providing statistical data sources are different, usually including national statistical offices, and other institutions or methods such as surveys / polls.

Also, another way of measuring entrepreneurship can be achieved by compared evaluation between countries or regions, through measures that require the availability of data in a standard, uniform format, designed to ensure their comparability.

In other cases, such as the Global Entrepreneurship Monitor, entrepreneurship measurement is based on attitudes and activities mainly manifested in the preliminary or initial phases of the business.

The theoretical and empirical research have identified as main factors for the integration and success of entrepreneurship, the following: - risk-taking in order to obtain profit - control of the situation - the need for autonomy and independence - innovative spirit and creativity - self-confidence and self-determination - failure tolerance - tolerance of ambiguity - the need for achievement - former occupation - the ability to learn.

The assessment instrument used by the European Commission to measure entrepreneurship is the entrepreneurship Eurobarometer, which is based on reports realized in member countries and captures the attitudes and perceptions on a set of indicators features.

Measurements focus on relevant issues to characterize the determinants and trends for the development of entrepreneurship in society, namely: self-employed status vs. employee status, preferred status, reasons for engaging in activities on their own, perceptions of entrepreneurship, the feasibility of becoming self-employed, the desire to become self-employed, concerns about starting a business, experience in starting a business, perceptions the entrepreneurs and the role of education, perceptions of entrepreneurs, the role of education for entrepreneurship.

Thus:

- 58% of Europeans would prefer to work as employees, while only 37% would be willing to work on their own.

- The attraction to work on their own ranges from 58% in Lithuania to 22% in Sweden.

- In 18 of the 27 EU Member States persons who prefer the employee status in a company is the majority, reaching 74% in Sweden and 73% in Denmark.

- It is observed the tendency of misguided perception of EU citizens towards self-employment, which fell from 37% in 2012 compared to 2009, when 45% were willing to operate on their own.

- Almost half of Romanians (48%) say they would choose variants of possible careers, self-employment being desirable. This percentage exceeds the EU 37% average.

- Half of respondents in Romania indicate as obstacles to become self-employed the lack of financial resources, which means a lot compared to the European average of only 12%.

- 56% of Romanians declare that the main risks for Romanians business are the risk to fail, representing more than the EU average which is 43%.

- 26% of respondents in Romania replied that have started or intend to start a business, the percentage being higher than the EU average (23%).

- As in the EU, in Romania 23% of people say they have taken a course in entrepreneurship, while a 76% say they have never attended such a course.

- Regarding perceptions about entrepreneurship and entrepreneurs, a large majority of Romanians (85%) think that entrepreneurs create jobs (compared with 87% at EU level) and 85% of Romanian citizens agree that entrepreneurs create new products and services of which we all benefit all, exceeding the average of 79% of EU citizens.

Entrepreneurship in Romania

Economic development depends on the general business activity of any region, according to the type of economies in the countries evaluated. Thus, in factors of production-oriented economies existing in poor countries, the average rates of entrepreneurship are higher in the initial phase, which expresses the need to increase the gross domestic product (GDP), by starting new businesses. In economies-oriented towards efficiency, where the values of GDP per capita are higher, the rates of entrepreneurial activities in the initial phase are lower, while in economies based on innovation these rates are higher because of the opportunities for entrepreneurial development and innovation for economic environment.

A particular case is that of countries in Eastern Europe, including Romania, that have experienced a period of profound system structural change, concurrently with a decrease of population. They generally have fewer entrepreneurs and therefore an insufficient number of new private businesses.

There are enough reasons why many people choose to conduct business on their own instead of the employee status. Most often, entrepreneurship is regarded as an opportunity or as a mean of existence in the absence of an alternative or for fear of becoming unemployed in a future perspective. As opportunities, are declared the desire for independence and greater financial gains than in the case of an employee.

A separate category is that of entrepreneurs motivated by necessity, those who say they have not found another way to earn a living. Opportunity oriented towards improvement refers to those entrepreneurs who value independence and seek to improve permanent standard. This type of motivation is most common in innovation-oriented economies.

Romania is placed in a favorable place (8) in the GME ranking, with a percentage of 47.16% of the options. Analysis of entrepreneurial motivation presented by GEM report shows the share of entrepreneurs in early stage motivated by opportunities is 67.3% and double, namely a doubled value compared to the one recorded in early stage for entrepreneurs motivated by necessity. It can be concluded that more than two-thirds of entrepreneurs in early stage are motivated by opportunities.

Regarding the aspirations of entrepreneurs, they can be classified into three main categories: business internationalization, innovation and business growth expectations.

The main difficulties the Romanian entrepreneurs face with

Of these, the most important are: difficult access to financing, unpredictability of the tax system, cumbersome fiscal for requirements and regulation, taxes level, lack of entrepreneurial and professional education and entrepreneurial culture, the local economy state and gaps, lack of political stability and vision of public policies, corruption.

Therefore, financial constraints presented the most serious problem for new businesses. The impact of the crisis on the demand side difficulties is also significant. As a result of the financial crisis, lack of resources of potential customers has become the most serious problem faced by start-ups and their founders. Furthermore, to this are added barriers of increased competition in the market. Prevalence of difficulties related to the poor information degree on the market of the new entrepreneurs and the lack of marketing skills was lower in 2008 compared to pre-crisis years.

Enterprises demography in Romania

Analysis of a key indicator for entrepreneurship dynamics, as enterprises demography, reveals the manifestation in 2010 of the turmoil in the process of input and output of enterprises in business environment, after a steady positive trend before this time; however it appears the resumption of the upward trend in the number of registrations in the second quarter of 2011.

Demographic trends of enterprises occurred in a natural dynamics for private business environment in Romania, which was relatively new and marked by profound systemic changes in the last two decades. Deprived of experience and the skills required, Romanians entrepreneurs have chosen the activities on their own in an attempt to fruiting the new opportunities and market circumstances or simply from the need to ensure means of subsistence.

On the background of instability and unpredictability of the business environment in that period, demographic fluctuations occurred with different intensities. Basically, after a period of consolidation of regulatory and institutional systems, firms demography has experienced a steady growth between 2005-2008, followed by a decline, occurred in 2009, with the installation of the economic crisis.

Basically, at the end of 2008, the SME sector reached the highest level in terms of demographic development, namely a number of registered firms greater than 508,000. The magnitude and rhythm of changes in 2009 led to a number of variations in terms of demographics, both in terms of registration, and in terms of market exit, marked by temporary suspension of activity and deletions in the Commerce Register.

The entrepreneurial impact in local and national economy

The contribution of entrepreneurship to increasing economic performance and securing the welfare and social cohesion can be easily evidenced by the relationship between the entrepreneurship indicator values and macroeconomic results.

In relation to the global indicator and most detailed indicators, Romania has a precarious situation, being placed on last positions in the annual rankings of comparative assessments drawn up by the Global Entrepreneurship Monitor.

Starting from the number of active firms in Romania, as the main indicator of entrepreneurship, it can be seen the impact on jobs and contribution to value added, according to comparative data with average values registered in the European Union. SMEs are numerically the majority, owning a share of 99.7% of the total number of active enterprises in the economy in Romania, similar to the proportion of EU-27. They make a significant contribution, of 65.9%, in total number of employees and are very close to the average of SMEs in the European Union (66.9%). SMEs in Romania participate in a proportion of 50.2% to the gross value added in the economy, a lower percentage than the European average of 58.4%.

The reality concerning the impact of entrepreneurship in the economy and society, recognized globally through studies and reports from international organizations, is confirmed in Romania by using regional analysis.

Meanwhile, by 24 SMEs per thousand inhabitants, Romania is the second lowest in the European Union, under the European average of 40 SMEs and more even below the average in countries like Hungary (57 SMEs to the thousand inhabitants) and Bulgaria (41). And the trend is not a positive one, the number of newly created companies in 2014 was 101,000, with almost 19% lower than in 2013, representing the lowest number of companies created in the last seven years in Romania.

In terms of local impact, between regions of Romania's development there are great differences in terms of entrepreneurial base which is reflected in indicators of local economic and social development.

In relation to the percentage of enterprises, the eight regions can be classified into three categories, as follows: - Bucharest- Ilfov region, is the most developed, detaches from the rest of the regions and holds 24% of the national total; - North-West, Central, Southeast, Northeast and South Muntenia, with SMEs sharing values between 14% and 11%; - The West and South-West Oltenia, with a share of 9% and 7% of total SMEs.

SMEs density (the number of SMEs per 1,000 inhabitants) is a relevant indicator for the entrepreneurial level, nationally or regionally. The density value of SMEs in Romania is very low, accounting for almost half the European average of 24 SMEs / 1000 inhabitants in Romania compared to 42 SMEs / 1000 inhabitants in the European Union. Basically, Romania is the second lowest in the European Union under the European average of 40 SMEs and even much below the average in countries like Hungary (57 SMEs per thousand inhabitants) and Bulgaria (41). And the trend is not a positive one the number of new companies in 2014 was 101,000, with almost 19% lower than in 2013, representing the lowest number of companies created in the last seven years in Romania.

The role of education in development of entrepreneurship

Entrepreneurial education at all levels - primary, secondary, university or continuous professional training - plays a major role in acquiring key entrepreneurial skills. Entrepreneurship education has a positive impact on the entrepreneurial spirit of the young generation, on the attitude and willingness to private initiative, and ultimately its role in society and the economy. Entrepreneurial skills that can transform ideas into actions include: creativity, innovation, risk taking and project management capability and achieving goals. Furthermore, it helps to understand a given context and to evaluating opportunities, so that determine entrepreneurial initiative and starting a commercial activity.

The objectives of entrepreneurial education are related to improving young people's entrepreneurial skills, fostering creativity and self-confidence; encouraging innovative startups; increasing the role of entrepreneurs in society and the economy.

Although necessary for learning entrepreneurial knowledge is increasing, there are still a number of obstacles in developing entrepreneurship education, especially in terms of financing and human resources. And in Romania there have been taken important steps by introducing elements of entrepreneurial culture in the school curricula ever since the first grades of study, continued at the

secondary school. By reviewing the curricula for all school levels approved by Ministerial Order 5097/2009, entrepreneurial education is explicitly recognized as a cross-curricular objective.

One of the modules successfully applied in vocational high schools is entrepreneurial education, by introducing the concept of "training firms". Oriented practical education and professional experience are essential for encouraging the way of thinking and entrepreneurial skills.

It is imposed a systemic approach by integrating an "ecosystem" of entrepreneurial education in all forms, from the compulsory curriculum of national education system, continuing to improve the supply of university-level training and continuous professional education.

Romania should develop a national strategy for entrepreneurial education drawing inspiration from successful models of other European countries. Such a strategy should provide essential elements for a coordinated and effective development of entrepreneurial education regarding: ministerial collaboration; stakeholder consultation and involvement of national and local; provision of key competences by the national curriculum; monitoring and evaluation systems with targets and indicators for measuring; training teachers and, not least, funding sources provided.

In Romania entrepreneurial education into the national education system is materialized by:
- courses aimed at developing entrepreneurial skills to secondary level

- entrepreneurial education in high school

- training firms in secondary education with services profile

- training teachers in vocational and technical-profile services, for extending the modern method of learning interactive training firm

- entrepreneurship in higher education

- Junior Achievement Romania Program

Entrepreneurial education through continuous professional training includes:

- programms for entrepreneurship education developed by Post-Privatization Foundation;

- the programms of the Agency for implementing programs and projects for SMEs;

- the Operational Human Resources Development Program (SOP HRD)

Conclusion

Entrepreneurship research revealed correlations established between innovation and entrepreneurship, even just by the changes taking place in the market due to the implementation of entrepreneurial initiatives. Such changes can take various forms: the marketing of a new product, service or quality level higher, the introduction of a new method or process of production, opening new markets, new sources of supply and new materials and components, achieving a new structure or organizational forms.

Encouraging entrepreneurial initiatives and unlocking the growth potential of European affairs are the current major objectives of the EU agenda, transposed into the Entrepreneurship Action Plan 2020 by three strategic directions: development of education and training in the entrepreneurial field; creating a favorable business environment; dissemination of models and develop entrepreneurial attitudes.

There are five pillars that support the development of entrepreneurship in Romania: entrepreneurial culture, access to finance, regulation and taxation, coordinated support, education and training. In the vision of Romanian entrepreneurs, of the measures that would support on short-term the business development are: reducing the tax burden and providing fiscal facilities, reduce bureaucracy and simplify legislation and the Tax Code, providing guaranteed loans, especially for start-ups, improve collaboration and communication between the public and private environment, ensuring stability of the tax environment and improving the entrepreneurial education and training levels.

Also, in order to improve entrepreneurial education, entrepreneurs indicated:

• business courses and real practice to students in firms from the region the high school is located,

• changing teaching and assessment methods of education,

• funds for the reimbursement of courses attended by entrepreneurs,

• coherent program to revitalize occupational schools,

• financial education courses in schools,

• the involvement of professionals who have created and increased business in organizing and delivering entrepreneurial education,

• forcing the academic environment to have a relationship with the private system (for example 50% of teachers to be external collaborators from the private sector).

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SUSTAINABLE ECONOMIC DEVELOPMENT

CIRCULAR ECONOMY- A POSSIBILITY FOR A SUSTAINABLE ECONOMIC DEVELOPMENT

Florin Răzvan BĂLĂŞESCU[97]

Abstract

As mentioned in the European official documents one of a main objective of European Sustainable Development is the way to an European Circular Economy aiming to an efficient resources allocation , diminish the environmental impact of toxic natural environment, creating new jobs through a innovative management through the relationships between public authorities, economic agents and universitary environment.

In this framework, circular economy is a concept as well as a development strategy, that takes into account the general triad principles of circularity, cascade effects and zero waste inspired by the heliocentric model of matter and waste transformation applied to the material, informational, managerial,knowledge educational and spiritual concrete forms of manifestation.

Keywords: circular economy, economic sustainability, learning to learn

JEL code: Q01, Q57, M21 D83

Nowadays, the competition between East and West more specific between China and European Union takes a specific form of so called strategic transition to a Circular Economy, as stated in the European Commission documents package or in the Circular Economy Law in the China legislation framework[98].

Circular Economy (CE) is in equal measure a theoretic concept and practical application but also invite to an spiritual noetic self-interrogation related to profit, knowledge and living issues that fuel in a sustainable way the interactions between natural environment, economy and society.

At a first sight, CE concept illustrates simple but important characteristics-circularity, cascade effect, and zero-waste ideal- inspired by the Heliocentric Biomimicry model, the way of how Planet Sun teach us: the Solar Light and Radiant Energy (as a center) is transformed into crops which in turn are transformed into biomass that can be refined into products. The residual waste resulting from this production process is feed back into the loop and is either used as compost to help grow crops, turned into food or animal feed, or used to supply the energy required by other steps in the entire process.

In this context, all natural resources are in way or other in a continuous process of a circle transformation because they are renewable but not exhaustible (wind, solar radiation, ocean and air),renewable but exhaustible (biodiversity, freshwater, etc.) or as simple resources which are exhaustible(fossil fuels and radioactive materials).

This process of circle transformation begins with a cradle to grave and ends with cradle to cradle. In this framework, at the beginning, cradle-to-grave approach aims to improve the environmental performance of products and to minimize environmental degradation throughout the product life cycle. The life cycle ranges from extraction of raw materials via processing, assembling, use to disposal of the product as waste. This approach could be represented by a linear model to take-make-consume-throw away and dispose. (figure 1).

Cradle-to-cradle concept goes one step further, envisioning cyclical material flows, where each material at the end of a life cycle becomes the raw material of another generation of products so

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[98] European Commission (2014) - "Scoping study to identify potential circular economy actions, priority sectors, material flows and value chains" Funded under DG Environment's Framework contract for economic analysis ENV.F.1/FRA/2010/0044, 2014 http://www.ieep.eu/assets/1410/Circular_economy_scoping_study_-_Final_report.pdf; Order of the President of the People's Republic of China no.4/2009, http://www.fdi.gov.cn/1800000121_39_597_0_7.html

the term waste would even become obsolete by enabling their perpetual flow within one of two metabolisms: the biological metabolism and the technical metabolism. (figure 2).

Fig.1. *The linear structure of the industrial economy (or 'river' economy).*

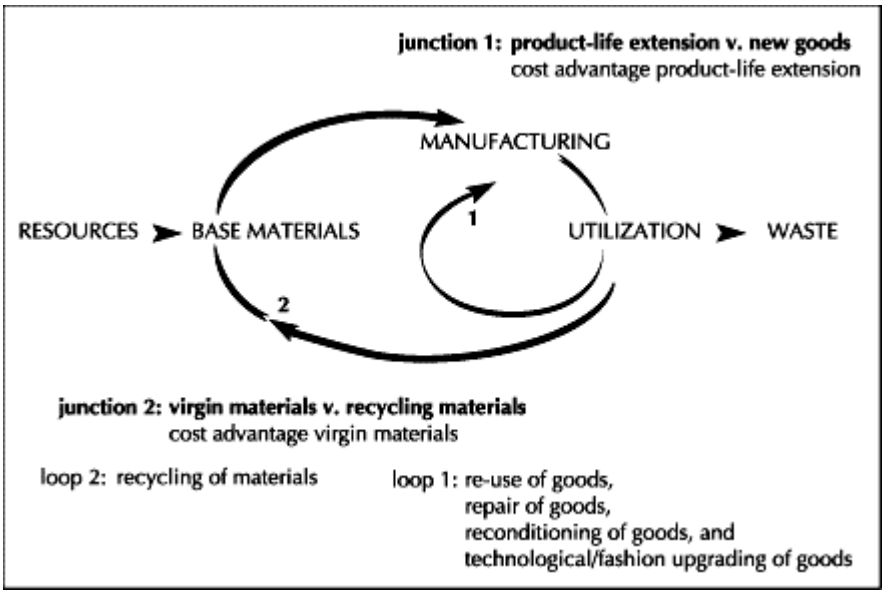

Fig.2. *Non linear Model of closing material loops:opened to a more sustainable service economy (or 'lake' economy)*

Source : Stahel, W., 1998. "From Products to Services: Selling Performance Instead of Goods", IPTS Report, Vol. 27., http://www.greeneconomics.net/Stahel%20Essay1.doc

From a theoretical perspective, CE is rooted in the sustainable development general framework related to weak and strong sustainability models (Steady State and Degrowth), but also inspired by other sources (the classical Kondratiev waves of long term economies evolution) to illustrate finally through a comparison between an extensive linear and an efficient-intensive non-linear approach of interaction between society, economy and natural environment, the importance of so called transition from cradle-to-grave economics to cradle-to-cradle spaceship economics with its 3R features(reduce, reuse, recycle).[99]

Then this CE cradle to cradle principle could be applied to the quantity, quality, structural and final utility analysis of different goods, services, business management skills, education & knowledge public finance strategies or noetic-spiritual self-interrogative issues that fuel in a sustainable way the interactions between natural environment, economy and society .

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CE notion illustrates a new way of thinking based on the generous idea of sustainable investment in the 3R-to reduce, recycle, reuse-: in every apparent waste insignificant thing or living form you can find always something useful for future or raison d' être as in the case of the concept of learning to learn in the works of Joseph Stiglitz or in the sustainable open minded meaning of deep ecology mentioned by Arne Naess.

In the CE an important place have the analysis of nature and reason effect of waste on the supply chain and life cycle of raw materials, products, services, knowledge & education in a quantitative, qualitative, structural and final utility design analysis that implies a long life learning of what does really means an idealistic zero waste in a world of material transformation into information and conversely from information to materials.

In this framework CE illustrates some concrete interrelated possible forms of manifestation as in the case of material, informational, managerial, socio educational and spiritual perspectives.

From the material perspective, waste means to considerate the weak and strong sustainability characteristics:

- on one hand waste is as an externality effect on the economy in the form of a transition from "polluter principle" to a "pay as you throw" principle fact illustrated by the international experience of landfilling and municipal solid waste management to obtain from waste hydrogen and methane-the future fuels;

-on the other waste is an resilience based effect on economy supply chains in different forms (material, energetic, informational). In this framework, waste is a material entropic flow result of a multidisciplinary advanced industrial ecology management based on absolute and relative dematerialization within an eco-industrial park space characterized by industrial symbiosis and habitus socio- psychologic practices.

-the final goal of material perspective is to make a distinction between material circularity and product circularity: the former is related to the toxicity landfilling of solid municipal waste management as well as to extract hydrocarbons such as methane, the latter related to a more sustainable length and duration of product value chain design

Both of these aim to change the material composition of the product as well as to promote a "second hand" voluntary simplicity consumption pattern by reduction, substitution or reutilizing to make the product still useful in integral or partially.[100]

From the informational, managerial and educational perspective waste circularity means to considerate the following issues.

The informational perspective illustrates continues some of the material circularity issues in the way of consider the waste not only a problem of material experimental sciences but also a problem of conceptual eco innovative design thanks to the service sector activity.

In this context appears an incapacity of material circularity to manage the material flows on the market due to an oversupply of secondary resources generated by the second hand market loops.

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From this perspective, material circularity is a necessary but not a sufficient condition for a circular economy because service industry generate a new characteristic of circularity applied to specific wastes in the supply chain product (physical, energy, informational).

As mentioned some researchers such as Walter R. Stahel(1998) or recently Renu Agarwal and others(2015) the service economy system play an important role in the circular economy as an integrated system "to create the highest possible utilization value for the longest possible period of time while consuming as few material resources and as little energy as possible".

In this respect, the service informational circularity minimize the generated waste conditions (the overproduction situations, lost opportunities related to eco-innovations, or in other marketing activities that affect a proper dissemination of information to the consumer).All of these conduct to the importance to imagine and conceptualize a new product matrix based on the actual one features within a process of social and technological learning .

In the managerial perspective, as stated by some researchers like Bas Mentink(2014) or Susana Garrido Azevedo and others(2014),CE means to take into account a new eco-innovative business model.

The starting point is the fact that eco-innovation is the way from idea to the market success related to new goods, services, organizational change or marketing solutions that reduces the use of natural resources(including materials, energy, water, and land) and decreases the release of harmful substances across the whole life-cycle.

From this perspective, the managerial circularity is interested to transform the linear threats of material and informational wastes into circular opportunities, to generate more confidence between firm stable or interested stakeholders, to improve the external image and gain legitimacy in the market place as well as to contribute to modernization of legal framework and political climate related to a transparent lobbying.[101]

In this framework eco innovation creates multiple circles that need to take care on a specific non linear managerial circularity model to diminish and reevaluate the the specific managerial wastes generated by the redundancies in management thinking by using for example the SIX sigma or TRIZ algorithms in solving problems.

The former is a statistic analysis of information portfolio structure externalities and the latter – named as theory of inventive problem solving- is interested in a syntetic formulation of problems, searching the analogies between internal stake holders and finally to resolve the problem with the help of so called external information brokers (highly specialized actors-university teachers, research institutes, consultant companies or other interested companies acting on the supply chain).

[101] Bas Mentink (2014)-" Circular Business Model Innovation -A process framework and a tool for business model innovation in a circular economy", Master thesis of Science in Industrial Ecology & Leiden University, http://repository.tudelft.nl/view/ir/uuid%3Ac2554c91-8aaf-4fdd-91b7-4ca08e8ea621/
Susana Garrido Azevedo, Marcus Brandenburg ,Helena Carvalho Virgílio Cruz-Machado (2014)-"Eco-Innovation and the Development of Business Models - Lessons from Experience and New Frontiers in Theory and Practice, Greening of Industry Networks Studies Vol.2, Springer International Publishing Switzerland 2014, chapter 2 "Managing Cross-Industry Innovations: A Search Strategy for Radical Eco-innovations" authors Michaela Kloiber and Reinhold Priewasser, pag. 19-39, chapter 5 "Radical and Systematic Eco-innovation with TRIZ Methodology", author Helena V.G. Navas, pag 81-99

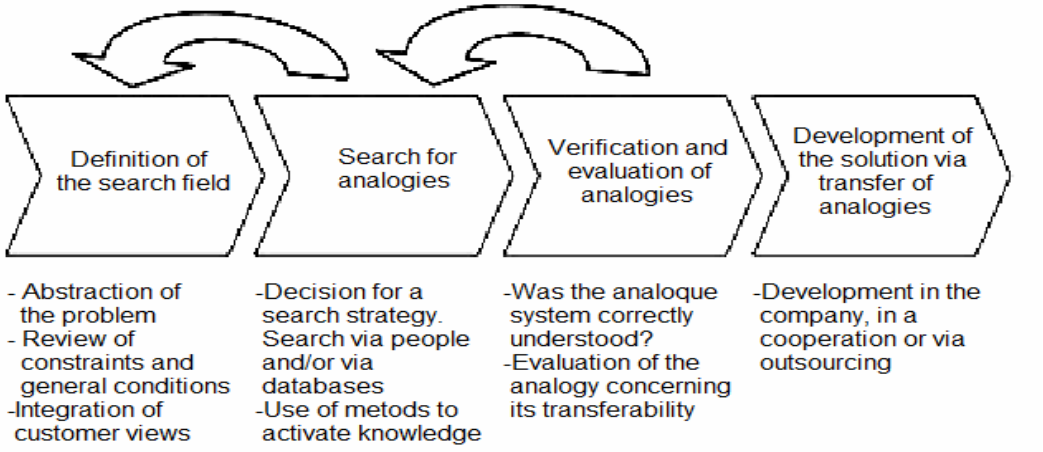
Definition of the search field
Search for analogies
Verification and evaluation of analogies
Development of the solution via transfer of analogies
- Abstraction of the problem
- Review of constraints and general conditions
-Integration of customer views
-Decision for a search strategy. Search via people and/or via databases
-Use of metods to activate knowledge
-Was the analoque system correctly understood?
-Evaluation of the analogy concerning its transferability
-Development in the company, in a cooperation or via outsourcing

Fig.3. *Process model of using analogies in product development*

Source : Susana Garrido Azevedo and others (2014), page 26

The socio educational perspective illustrate the CE as an important factor in construction of a knowledge society based on human capital development. That means to take into account two possible of educational circularity models related to weak and strong sustainability characteristics.

On one hand is about the so called classic Triple Helix model mentioned by Henry Etzkowitz (2008) or environmental habitus concept invented by the sociologist P. Bourdieu .

These models are based on an interdisciplinary, multidisciplinary, and complementary relationship between public authorities, economic agents and academic environment in the present this models includes also the consumer, civil society and mass media culture.[102]

On the other hand ,the educational circularity illustrate importance of positive externalities from learning for individuals and society in a learning to learn process of continuous development of personal endowments abilities to transform ideas into knowledge as stated the works of Joseph Stiglitz[103].

In this framework is important to take into account the relations between the object of learning (to became conscientious about the importance of personal endowment ability to transform inputs into outputs) and the process of learning to learn(learning for the future or by learning to learn by learning from others, from trade, using the technology and social sciences instruments) to create in final a learning architecture of learning principles, instruments and values system that create new space of market competition and better relations between people based on rule of law , economic rationality and emotional intelligence.

The last but not the least the spiritual perspective of CE illustrate the importance of creating the possibility of something new taking into account the necessity to integrate the philosophical methods of wishful truthful path approach, synthetic, analytic methods in the real and ideatic worlds.

In the same time it is to consider a deep ecology noetics that opens a new horizon of transforming the individual defined in the economic, psychologic ,sociologic ways into a conscious person that manage a circular logical time of issues of the fact that it is not a simple homo oeconomicus or zoon politikon that comes from nowhere and goes to nowhere but a person creation prototype of a

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[102] Henry Etzkowitz (2008) - "The Triple Helix: University-Industry-Government Innovation in Action" Routledge, 2008; Loet Leydesdorff (2011) The Triple Helix, Quadruple Helix, and an N-tuple of Helices: Explanatory Models for Analyzing the Knowledge-based Economy? http://www.leydesdorff.net/ntuple/
Justin Karol and Trevor Gale() - "Bourdieu's Social Theory and Sustainability: What is 'Environmental Capital'?" http://www.aare.edu.au/data/publications/2004/kar041081.pdf

[103] Joseph E. Stiglitz and Bruce C. Greenwald (2014) - "Creating a Learning Society - A New Approach to Growth, Development, and Social Progress", Columbia University Press New York,

Trinitarian Loving God that makes the world from nothing (creatio ex nihilo) and make possible by His humility sacrifice for human being to deepen in his rationality and sensible features [104]

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THE ROMANIA'S POSITION REGARDING THE COMMITMENTS OF GHG EMISSIONS REDUCTION

Georgiana CHIŢIGA[105]

Abstract

Romania's Position of member in the EU It includes not only rights and opportunities, but also responsibilities - participation in the EU Emission Trading Scheme (EU ETS) of greenhouse gases; the analysis expands upon the three flexible mechanisms the Kyoto Protocol, they have been implemented in order to support and to fulfill of the Commitments of GHG Emissions Reduction.

The long term trend is to have an international carbon market where all the systems and the mechanisms of CO_2 emissions trading, they might unite and they might interconnect. Although initially, the Romanian's operators have encountered o lot of difficulties, using the mechanisms created to the Kyoto Protocol, they have overcome these issues and they have acquired the capacity to respond quickly to market developments.

Keywords: low CO_2 emissions, mechanisms, ETS market

JEL classification: Q53, Q58.

1. Introduction

Romania signed and transposed in the national legislation: The United Nations Frame Convention over the Climatic Changes (UNFCCC) (in 1994), as well as the Kyoto Protocol (in 2005).

The Kyoto Protocol allows the Parts which ratified it to fulfill the commitments to reduce the GES emissions (the carbon dioxide is the reference gas with the help of which the other GES are calculated and reported), combining the politics and the internal measures with three flexible mechanisms, and these are:

• Joint Implementation (JI);

• Clean Development Mechanism (CDM);

• International Emissions Trading (IET).

The EUA, CER and ERU certificates are transacted into Romania according to a decision of the government (2006) regarding the establishment of the Scheme of Trading the Certificates of Emissions with Greenhouse Effect.

The Frame Convention UNFCCC and the Kyoto Protocol were implemented through the National Strategy regarding Climatic Changes (2005 - 2007) and the National Plan of Action regarding climatic changes; it was also created the National System for estimating the level of the emissions of gases with greenhouse effect resulted from sources or from the retention through seizure of carbon dioxide; the National Inventory of the emissions of gases with greenhouse effect progress was recorded for accomplishing obligations.

Romania signed the Kyoto Protocol being the first Part found on Appendix I of UNFCCC.

(a) The mechanism of Joint Implementation (JI) is made by complying with the stipulations from OM (2006) - to approve the Guide regarding the use of the JI mechanism based on module II and OM (2008) - to approve the National Procedure regarding the use of the JI mechanism based on module I;

(b) The International Emissions Trading (IET) mechanism was implemented based on the National Strategy regarding Climatic Changes.

Through the Government Decision from 2006 regarding the establishment of the scheme of trading the certificates of gas emissions with greenhouse effect there was created the legislative frame for transposing the procedures of the European Parliament Directive and of the European Council

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(2003) regarding the establishment of the scheme of merchandising the certificates of gas emissions with greenhouse effect inside the Community; there were established the bases of implementing the instrument (EU ETS) used by the European Union within the politics regarding climatic changes.

In our country, the bases of implementing the EU-ETS Directive were represented by:

-the procedure of issuance the authorizations regarding the gas emissions for the period 2008 - 2012;

-the establishment of the guides regarding the monitoring and reporting the GES emissions under the scheme of trading;

-the regulation regarding the management and operation of the National Register of the GES emissions;

- the approval of the Allocation National Plan.

At the moment, we are in the third phase EU-ETS (2013 - 2020); two stages of institutional construction were made on this market:

- stage I - pilot 2006 - 2008

A very high number of certificates were assigned, having as a consequence the sudden drop of their price.

- stage II - 2008 – 2012

According to the data from the European Agency for Energy (EAE) there were included over 12.900 installations from 30 attendee states with an annual aggregated average of 1970 Mt of carbon dioxide/year; 3/4 of the whole GES emissions come from the burning installations (73%) and from the thermal stations in cogeneration - ESS (the combined thermal stations that generate both electrical production and heat, ensuring a rational use of fuel).

2.GHG Emissions Reduction - The Romania's Position

In this stage, the economic crisis determined the restricting of economic activities and as a consequence, the reduction of the emissions much more than it had been foreseen so that the number of certificates given for free was much larger than the necessary in the ETS branches. However, as a tendency, the number of the emission certificates recorded a descendant trend in the second stage compared to the first one; in 2008, the GES emissions were reduced with 5% compared to the level from the year 2005, recording 1910 Mt of carbon dioxide, 14% under the level from 2005. The number of emission certificates was higher than the necessary/ the pollution target in all the countries, excepting Germany, Great Britain and Norway where the quantities of GES emissions overtook the value of the certificates.

The ascension of the certificate market is also a sensitive barometer of the economic crisis.

The third EU ETS stage is significantly different from the first two stages through the existence of:

-*the maximum European ceiling* (EU-cap-and-trade), instead of the national system of assigning emissions;

- *the Unique European Emission Register*;

-another rule is represented by the purchase through the *actions* organized by the European Commission and by the member states on the designated European exchange (compared to the method of free allocations used until now).

In 2013, a new decision was issued in order to modify and complete that from 2006; this transposes into Romania the regulations regarding the air district from the scheme of merchandising the certificates of gas emissions with greenhouse effect.

The projects *Joint Implementation in Romania* displayed by developed countries; these fulfill the commitments provided by the Kyoto Protocol with lower expenses (than if they had reduced the same quantity of emissions in their own country) and Romania implements projects which have as

a result the changeover of installations and the decrease of the GES emissions from different branches, such as: energy, industry, agriculture, transport, scraps and so on, thus supporting the economic and social development in a durable way, but also the recording of beneficial effects over the environment.

These mechanisms are part of the "win-win" politics, where both parts benefit from their implementation.

From the year 2009 transfers of the units of reducing emissions have taken place (for the reductions of emissions generated in the year 2008) based on the reports of checking the reductions of monitored emissions. The commitments of the transfers of the emission reduction units (ERU) resulted from the JI projects belong to the Parts and in accordance with the national legislation into force, Romania had to ensure the legal frame by signing some Understanding Memoranda or Agreements among Governments or among the Spring Ministries.

Romania subscribed to 10 Understanding Memoranda with different countries: Switzerland, Holland, Norway, Denmark, Austria, Sweden, France, Finland (including the international merchandising of emissions), Italy, as well as with the Prototype Fund of Carbon set up by the World Bank, following that, in the future to exist this type of agreements with other developed countries included on Appendix I.

Up until now, Romania has 16 JI projects, among the projects approved there prevails those which are situated under the incidence of the local authorities: systems of centralized heating (including by using renewable resources of energy - sawdust, geothermal energy), closing of scraps deposits. There are investments with positive impact, both by reducing the GES emissions and over the environment, generally from a social point of view (ensuring some comfort conditions at accessible prices). Through the JI projects it is offered the opportunity to fill in the financial scheme of a project that has as an effect the reduction of the GES emissions. The results of the project (materialized in ERU), will be the object of the transfer from Romania towards the investor country according to the credit period.

The reductions of the emissions produced, monitored and checked by an independent entity (accredited by JISC - Joint Implementation Supervision Committee) are transferred to Romania, with the help of the national register (as a result of the request of MMSC - the institution which is responsible for approving JI projects); the secure repository of the information comprised in the transfer notification and the modality of recording in the national register are established through the Decisions of the Conference of the Parts at the UNFCCC and at the Kyoto Protocol.

The National Agency for the Protection of the Environment is the main institution that ensures the technical support for the MMSC to implement some stipulations of the UNFCCC and of the Kyoto Protocol. ANPM analyses the technical documentation that comes with the proposals of JI projects, presenting the results of the MMSC evaluation.

MMSC is supported by the National Committee for Climatic Changes in order to make decisions for the approval of the JI projects; it is an organism composed of the representatives of all the ministries involved in implementing the national politics in the branch of climatic changes.

For a project to be accepted, one must take into account the following criteria:

1. to support the sustainable development of Romania and to be in accordance with the objectives of the national strategies in the environmental district;
2. to present the project according to the procedure and to respect the eligibility criteria;
3. to take into account the stipulations of the UNFCCC, of the Kyoto Protocol and of all the rules, decisions, directing lines and procedures regarding the JI projects;
4. to offer environmental, social and economic benefits.

In what regards the externalities of the project:

1. The externalities regarding the GES emissions (leakage) may have as a result:

a. reduction;

b. overtaking the general benefits of limiting the GES emissions that the project can generate.

This situation does not exclude the project only if the externalities that may be negative come to overtake the possible benefits of the project.

2. The externalities (that do not refer to the GES emissions) can include effects on the development (social, economic, property rights, work force) or on the environment (availability of resources, emissions of pollutants and the loss of habitats and/or of biodiversity). The projects must not overproduce negative externalities these might overtake the general benefits of the project regarding the reduction of the GES emissions.

For Romania, the JI projects may refer to the changeover and efficiency of the installations which are outdated from a physical and moral point of view and implementing some new technologies in sectors (type of project) such as:

•rehabilitation and/or efficiency of the centralized heating systems;

•building installations of cogeneration/ transformation of some thermal stations into cogeneration ones;

•changing fuel in the installations of producing energy with "green" fuel/ using fuel with a low-content of carbon;

•rehabilitation and/or efficiency of some groups from power-stations; of some hydro-aggregates or hydroelectric stations;

•supporting the renewable resources of energy (hydro, geothermal, wind, solar, biomass);

•avoiding or recovering - with the purpose to use energy - gases dump;

•thermal rehabilitation of buildings;

•growth of energetic efficiency;

•changeover of some industrial installations;

•reduction of the GES emissions resulted from transport;

•reduction of the GES emissions resulted from agriculture;

• restocking of the land surfaces.

(b) Romania's quality as a member of the European Union includes not only rights and opportunities, but also responsibilities; the attendance at the European Scheme of trading certificates of gas emissions with greenhouse effect (EU-ETS) needed, in 2007, to adapt to the new requirements of 244 installations, afterwards the number grew as a consequence of accessing the reserve of new-entries.

From the year 2013, the novelty granted through the legislative pack is that the system of assigning emission certificates is harmonized at the level of the EU; the number of certificates given for free will be lower, they will be approved depending on the entrepreneurial strategies of the economic agents, on the business plan and they will quicken the significant growth of the importance of the market and at the same time of the price. Depending on the number of free certificates received, one will give up to a number of certificates equivalent with the quantities of emissions checked at the end of April every year. The companies that will dispose of a higher number of certificates than they require in order to cover their emissions will have either to sell certificates to other operators, or to keep them for other years. Companies can obtain emission credits from the CDM or JI projects in a limited volume to achieve the obligations regarding the abandonment of certificates, based on the CE Directive 2004/101.

The companies whose emissions exceed the assigned share will have to face high sanctions: 100 euro/t in the period 2013-2020; more than paying the penalties, the companies are obliged to continue depositing the lacking certificates for the following year.

The legislative efforts of the authorities from our country (the Environment Ministry, the Economy Ministry, ANPM) allowed the Romanian operators to transact in the year 2007 too, unlike those from other member states, for example Bulgaria. Initially, the Romanian operators had to face difficulties regarding both the understanding of the stipulations of Directive 2003/ EC and the ways of transacting the carbon certificates; with the help of the mechanisms created at the Kyoto Protocol, they surpassed these inconveniences and they achieved the ability to respond quickly to the evolution of the market, without any additional expenses. The Romanian operators (for example, Consus Romania SA was the first member of the Transacting Platform of the Certificates

of Gas Emissions with greenhouse effect of OPCOM - the operator of the market of electric energy and natural gases from Romania where 12 companies activate, as well as Alpiq Rom Energie SRL, Energetic Complex: Craiova SA, Rovinari SA, Turceni SA, EGL Gas & Power Romania SA, etc.) are members of the main European stocks: Blue Next (2006), EEX (2006) and ECX (2010), the Romanian Stock of Merchandise (2010).

When the company is included in the National Plan of Allocation, it means that it is included in the Scheme of Transacting European Emissions and it is obliged to comply with a number of certificates reported to the emissions declared in the reference year; it has to fulfill a the legal requirements.

Once they are given the emission shares, the profit of the company grows by selling these certificates at the best market price and in the best moment.

If the company has less emissions of carbon dioxide compared to the number of certificates assigned, these certificates can be kept as a reserve or they can be sold on the market. In the case in which there are not enough EUA certificates for compliance, there are variants of purchasing certificates.

Even if the functioning issues of the certificate emission market are major, recording a retrogression, there are premises that the market can ensure the decrease of emissions in the main economic branches that affect the environment; if this market transforms itself into an impediment regarding the growth of the competitiveness among companies by not achieving their purpose - modification of the companies' behavior towards the environment - and not only a powerful tool to adjust the environmental issues, there will appear a more pronounced risk of failure of the climatic policies of the European Union.

We confront ourselves with two situations: energetic policies that are complementary to the carbon market (the measures that aim at the request of thermal energy or of fuel in transport), other energetic policies influence directly the carbon market (energetic efficiency measures or promoting regenerative energy). In the case in which the measures appear after having established the limit of the allocated certificates, a diminished signal will be recorded, one transmitted by the level of the price of carbon and which decreases the investors' predilection towards green energy or non-pollutant technologies. As a consequence, a flexible tool is required, a tool to adjust in a proper manner the volume of certificates existing on the market/ their duration of validity and so on.

At the level of the EU, the ETS market was and it is still appreciated in a critical manner because of *the risks* that the investors have to face:

- the volatility of the price;

- the fluctuation of the investors' profit;

- allocating a great number of free certificates.

These low levels of the price do not stimulate the states, the companies or the investors to stand for additional expenses generated by the protection of the environment in order to support the expenses to reduce emissions/ modify technologies.

The trading of gas emission certificates may become the most profitable funding instrument for, the resulted funds can be used in order to finance any activity within the society, without any restraint.

3.Conclusions

The long-term tendency is to have an international carbon market in which all these systems and mechanisms of merchandising carbon dioxide emissions to join and inter-connect.

It is not enough to state that the insurance of the carbon emission certificates should continue - must continue at a maximum level for the most effective equipments**.** It is required: to ensure clear procedures referring to the new European regulations regarding the environment and the energy that will not impose direct or indirect expenses for carbon emissions for the most performing units, for the European industry that compete at a global level.

The companies should modify their technologies so that the technological and production processes could be less pollutant for the environment and for the human. In order to support the institutional effort, there appears the need for companies and economic sectors to participate in a larger specter.

It is requested a policy based on a functional producing industry, with places of employment in Europe, a policy which is beneficial for the European society; the products, their applications but also the employees represent the foundation of a prosperous European society, one which is effective from an energetic point of view, with reduced carbon emissions.

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THE IMPORTANCE REORGANIZATION TAXES AND REORDERING FISCAL PRIORITIES FOR SUSTAINABLE DEVELOPMENT OF THE ENVIRONMENT IN ROMANIA

Gabriela Cornelia PICIU[106]

Abstract

This article discusses the major challenges in the field of environmental sustainability: the reorganization of taxes and reorder fiscal priorities. To propose a viable solution to address these issues presents a comparative analysis between two EU countries which shows that 80% of environmental taxes in Germany are linked to energy taxes, while in Romania the highest proportion of the total excise duty on fuels derived. Other potential areas taxable provide 10-15% of total revenue for the environment. Romania is the country with the lowest environmental taxes in Europe, and should consider gradual increase in these fees reduced performance reveals environmental taxes. This is one of the reasons why Romania, unlike Germany fails to promote effectively the goals of environmental protection and sustainable development. A double impact on environmental sustainability in Romania could increase revenue from environmental taxes in an environment of budgetary crisis.

Keywords: economic environmental tools, environment taxes, fiscal priorities, sustainable development of the environment

JEL classification: Q48, Q52, Q56

1. Introduction

For more than twenty years the humanity tries to create equilibrium between the economic activity and the natural capital. The difference between the usage of natural resources, the productive potential, the demographic raise and the medium/long term ecological sustainability capacity is more and more obvious. The necessity of a change in people's mentality and also in the production and consumption practices has been developed in a new concept of sustainable development.

It is important of using taxes as an instrument of obtaining the correct price on the spot, but also of imposing the positive effects of development, desired and backed by political will and scientific basis.

An adequate development of the environmental taxes cannot be done without a vast collaboration between specialized organs in finance, vast scientific research in the field, with the positive approach of the political parties, national governments and unions that are integrated on a global scale.

2. Economic and fiscal stimulative instruments

The worsening of the ecologic problem has generated a wide reflection and debate over the means of public politics strengthening and increasing their effectiveness. Supported by an organization such as OCDE, the idea that the environment protection and sustainable development objective cannot be achieved without a diversification of the means of intervention and public politics instruments starts to take over. The classic approach of the ecologic problem, administrative and regulatory, is completed more and more by an economic one based on various stimulative instruments.

The concept of economic instrument is difficult to explain. Starting from the OCDE documents, UE and the doctrinal considerations, this category regroups an ensemble of instruments: tradable permits, fiscality, liability for ecological loss, the environmental certification of the products and the means of production, negotiated agreements and the social responsibility of a company. First of all,

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among these instruments, there is the fiscality which is composed by fiscal taxes and covers tax exemptions. Regarded such that fiscal expenses are reduced sources of fiscal inputs for the recipient of the taxation, the fiscal spending have the advantage of being more popular but with a cost which cannot be negligible for public finances.

Other economic instruments which can be used in the environment area are: subsidies (loans given by a public authority in order to stimulate an ecologic behavior), royalties for the service brought (administrative taxes), permits and emission rights recently appeared, etc.

3. Environmental taxes

The legislative politics of many States has revealed four main economic and fiscal stimulation means, useful for environment protection: taxes, grants, consignments systems and pollution stocks.

Taxes are used to sanction the environment harmful activities. When the limitation of excessive usage which leads to the degradation of the environment is necessary, the production or marketing costs will rise. At international level, there are various types of taxes or royalties, each of them having a precise goal:

a) Taxes to finance a public or private system for collecting, recycling and elimination of waste;

b) Taxes of pollution, which can be used to reduce the emissions from big and medium industrial companies; they can be monitories at a reasonable expense. These can be applied in the case of atmospheric pollutants (CO2, sulfur dioxide, nitrogen oxides and water pollutants such as organic materials, solid suspensions, heavy metals).

These taxes are named pigouvian taxes, being designed for price collection through taking into account the external costs.

The main purpose of pigouvian tax is the economic efficiency. For example a tax for emissions takes into account three elements:

-the reduction of the quantity discharged: the tax increases the marginal cost of production which reduces the equilibrium quantity available on market

-technical substitutions: the tax forces the company to use technologies which do not pollute as long as the cost of decontamination is lower

-development and research: the tax induces the company to develop new techniques of production and decontamination in order not to pay the tax

c) Taxes for financing the loss repairmen

For example: the tax on oil and chemical products in United States which feeds directly the elimination of dangerous products fund; taxes on aircraft produced noise feeds the riparian compensation funds of the airports; taxes imposed by the water administration are used to help the ones who purifies them.

From the point of view of resources allocation, the advantage of financial taxes may be:

-regarding the economic optimum, the financial tax induces that every public service made must have a price;

-regarding the environment, the tax works as an incentive that decreases the volume of emissions and waste;

The main goal of the tax is funding, the problem being analyzed from the point of view of State through pricing the public services. The effect is that the marginal cost is positive (null if the public service is funded through a tax that has nothing to do with the use of the service).

A tax implies the acceptance of some terms:

-a freedom of adaptation of those who pollute depending on the tax rate (which is not tolerated in the case of hazardous substances);

-a society must accept a residual pollution, which should not be accepted for those pollutants which would better be forbidden;

-the results of the tax are imprecise and delayed there is an uncertainty in what concerns the results.

The fiscal instrument inserted should be predictable and relatively stable in order to allow the ones involved to planning their investments against pollution; the tax must be easy to understand and implement and the cost of these activities must be low.

In order to be introduced in the tax practice and to be easy to apply, the taxes must answer a series of criteria which form the laws of fiscality: simplicity because a tax hard to calculate is difficult to implement. At the expense of efficiency it is necessary to be found an optimum solution, a middle way between a simple tax, less efficient and a hard to implement tax, transparent-the clarity of the tax objectives, the type of pollution and the means of usage of the amounts collected.

The taxation of the activities with a high impact on the environment is part of the Market-Based Instruments (IBP in Romanian) which represents one of the most powerful instruments of change concerning the model of resources usage every State has.

In Germany, the tax for coal combustion, introduced in 2006 had the value of 1.98€/GJ. , and in 2011 it raised to 2.5€/GJ. With the promotion instruments Germany is using in present, the heating market will double in 2020 comparing with 2010. Therefore, the Government of Germany is applying the following economic instruments:

-compensates a quota system for the fuels coming from sources of renewable energy;

-provides payments bonuses (buying) based on the private relations of change;

-approves funding (capital grants).

4. Energy taxes

Energy taxes include the taxes on energy products used for transport but also in order to power the stationary equipment. The most important products used in transport are gasoline and diesel. Among the products used for the stationary equipment are the natural gases, coal and electric energy.

Romania has a decrease of taxes on energy starting with year 2000, being on the last places in the European Union(with percentages between 1.9% from the value of GDP) comparing with Germany, which has a significant decrease in 2007, following that in 2010 to apply higher taxes for CO2 emissions. The evolutions can be explained through the actions of limitation of National Governments over constant rise of the natural gases and oil prices effects in the last years and through the accentuation of other instruments usage in order to achieve environment objectives (Figure 1).

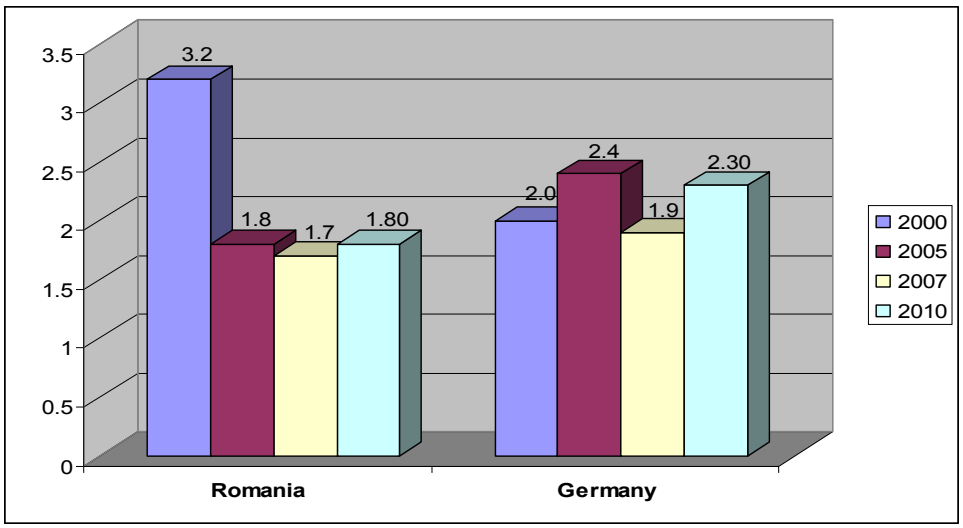

Fig.1. *The evolution of incomes from energy taxes (% GDP)*

Source: Umweltbundesamt/ Energiesteuern

The key measures used in these sectors are the construction and renovation of efficient heating systems with the reduction of CO2 emissions from a total of 31 million tons of CO2. An additional incentive is the Building Renovation System, State financed.

The high usage of cogeneration and renewable heat generation, in the household area and in the tertiary sector has reduced the co2 emissions until 18 million tons of CO2 a significant value registries in the last 2 years.

The taxation of energy is a national decision which generates systematic incentives in order to adopt efficient measurements of emissions reduction. From the energy consumer point of view, this taxation is advantageous economically speaking only if these marginal costs of avoidance are lower than the national rate.

The law offers to smaller companies a limit for reimbursement of energy tax. The ones who have consumed a small amount can receive the money back. For the companies in the producing industry (agriculture and forestry) which consume more than 25000 kWh of electricity per year, the environment tax is reduced from 2.05 cents/kWh to 1.23 cents/kWh.

Starting with the first of January 2008, the medium and small companies have the right to a reimbursement of eco-tax, in the case in which they have a minimum annual consumption of:

-heating oil: 12.530 litters (previous 25.100 litters);

-natural gases: 93.200 kWh (previous 140.00 kWh);

-GPL: 8460 kg (previous 140.000 kWh) euro/ kWh;

• GPL: 24,24 euro/kg.

For the individual consumption, the amounts of reimbursement are highlighted below:

-heating oil: 16.36 euro/1000 litters

-natural gases: 2.20 euro/1000 litters

-GPL: 24.24 euro/kg

In 2011, the taxes for energy continued to rise. While the fiscal incomes have risen, the energy tax rules have changed. The renewable energy law encourages the extensions of the installations which produce electricity from renewable sources of energy. The EEG tax rises to 3.53 cents/kWh; the cogeneration tax falls to 0.03 cents/ kWh (Figure 2).

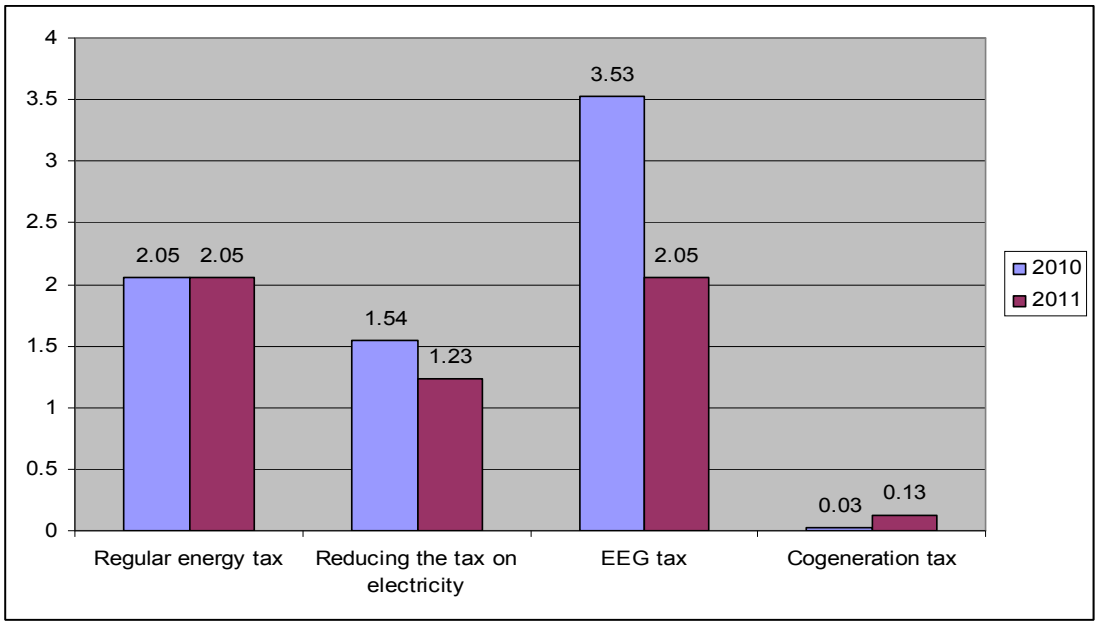

Fig.2. *Evolution of the price - taxes for energy*

Source: Umweltbundesamt/ Energiesteuern

The share of energy costs from the total energy costs varies even at the level of germen energy sector between 1%- 10%. This variation reflects the different taxation of fuels by reducing the fiscal tax share. On average, the costs associated with energy represent between 8%-14$ from the industrial sector costs.

Starting from 2002, in Germany, there have been allocated 550 million euro for annual reduction of emissions-193 000 tons of co2. By this action, in 2010 the quantity of CO2 emissions has been reduced with 17.000 tons.

This action may continue with a reduction of emissions by 2035 from 2.9mil tons to 3.2 mil tons of CO2.

In 2011, Germany had an emission tax of 23 euros/ton of CO2. These 23 euros are necessary to save a ton of CO2 in high quality carbon projects for developing compensation. With this amount, the quantity of greenhouse gases lowers and the costs for certification and management are covered.

Every month, a household pays on average 32 euro; more than in 2000 for the same quantity of energy and 14 euros for the transportation cost. This in turn generating the rise of prices.

5. Forecasts for 2020-2030

Through the rise of fuel energy tax, there will be created many efficient economic incentives for the economy of fuel and for CO2 emissions reduction.

The rise of taxes may lead to an annual report of 3 cents/liter from 2012 through the tax rates of energy, presented in the table below (Table 1). These form with the help of a basis of calculation a potential emission reduction.

Table 1

The rise of energy taxation rates between 2020-2030 2005

	2000	**2020**	**2030**
Energy tax without shares gasoline/diesel (cent/l)	65,45 / 47,04	65,45 / 47,45	65,45 / 47,45
Energy tax with shares gasoline/diesel (cent/l)	65,45 / 47,04	95,45 / 86,64	125,45 / 116,64

Source: Umweltbundesamt/ Energiesteuern, march 2011

In both states, energy taxation should be levied according to the carbon content of each fuel. Environment Agency proposes that the Federal Government of Germany to implement this adjustment gradually from 2012 to 2016.

The actions of economic instruments (Table 2) provided for the period 2020-2030 increased taxes on petrol and diesel by 30 cents / l and 40 cents / l In the absence of taxes uses higher tax rates will not act effectively against CO2 is likely a phenomenon of long-term increase in pollution.

Producers of electric energy from renewable energy: biomass, bio liquids, biogas can benefit from the promotion system established through law only if they have certificates released by accredited bodies, which attest the origin of their sources.

Table 2

Economic instruments of renewable energy promotion

	Share obligations	Certificates green	Tariffs "feed-in"	Exemptions fiscal	Taxes	Regularization	Subsidized loans
Germany	X		X	X	X	X	
Romania	X	X			X		

Source: data processed by the authors

In Germany, the main things on which the promotion instruments are based on can be:

-the objectives of CO2 emission reduction until 2020;

-energetic efficiency;

-internalization of costs in the transport sector.

Another essential idea on which Germany relies on is the bonus from the cogeneration tax or from the innovative technologies which can be considered an efficient incentive for the up gradation of energetic efficiency. An expected outcome is that 90% of the produced energy can be recovered, in comparison with the current power plants which have an efficiency of 48%.

6. Conclusions

From the information presented above, Germany as well as Romania uses two important instruments in order to achieve the objectives for climatic changes control: taxes on energy and selling emissions.

For promoting the renewable energies, a household pays approximately 10 euros, an acceptable amount for the population's income.

The promotion of renewable energy resources supposes high costs and bigger investments but the final price will be fair. A percentage of 88% from the German population wants the external costs calculation on the energy bill.

A comparative analysis between Romania and Germany shows that 80% of German environmental taxes related to energy taxes, while in Romania the highest proportion coming from all excises on fuel (petrol and diesel). Other potential areas taxable (CO2 emissions from air transport, agriculture, waste) get only 10-15% of the total environmental revenues.

Proceeds in both countries the state budget showed a downward trend during the period 2005 - 2012, event driven higher revenue from other areas and environmental neglect. Romania is the country with the lowest environmental taxes in Europe, and should take into account the gradual increase performance of those duties which reveals reduced environmental taxation. This is one of the reasons for which Romania, unlike Germany fails to effectively promote the objectives of environmental protection and sustainable development. A double impact on Romania solution may be to increase revenues from environmental taxes in budget crisis environment and use renewable resources available in our country.

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